

Appendix B

Laboratory Reports

(On CD)

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

October 20, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/27/2011

Group Number: 1268378

SDG: DE253

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-001-SA3-SS-0.0-0.5 Soil	6419488
SL-002-SA3-SS-0.0-0.5 Soil	6419489
SL-002-SA5DS-SS-0.0-0.5 Soil	6419490
SL-001-SA5DS-SS-0.0-0.5 Soil	6419491
SL-001-SA5DS-SS-0.0-0.5 MS Soil	6419492
SL-001-SA5DS-SS-0.0-0.5 MSD Soil	6419493
SL-001-SA5DS-SS-0.0-0.5 DUP Soil	6419494
SL-001-SA5DS-SS-0.0-0.5 RL MS Soil	6419495
SL-001-SA5DS-SS-0.0-0.5 RL LCS Soil	6419496
SL-026-SA5DS-SS-0.0-0.5 Soil	6419497
SL-027-SA5DS-SS-0.0-0.5 Soil	6419498
SL-028-SA5DS-SS-0.0-0.5 Soil	6419499
SL-029-SA5DS-SS-0.0-0.5 Soil	6419500
SL-030-SA5DS-SS-0.0-0.5 Soil	6419501
SL-031-SA5DS-SS-0.0-0.5 Soil	6419502
SL-032-SA5DS-SS-0.0-0.5 Soil	6419503
DUP01-SA5DS-QC-092611 Soil	6419504

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

ELECTRONIC COPY TO CDM Federal Services Program

Attn: Todd Burgesser

1 COPY TO Data Package Group

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

Respectfully Submitted,



Sarah M. Snyder
Senior Specialist

Sample Description: SL-001-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SS-0.0-0.5

LLI Sample # SW 6419488
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 07:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL001 SDG#: DE253-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	500	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,300	1
04688	Benzoic acid	65-85-0	170	U 170	500	1
04688	Benzyl alcohol	100-51-6	170	U 170	500	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	33	U 33	170	1
04688	4-Chloroaniline	106-47-8	67	U 67	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	33	U 33	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	330	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	33	U 33	170	1
04688	3,5-Dimethylphenol	108-68-9	33	U 33	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	500	1
04688	2,4-Dinitrophenol	51-28-5	330	U 330	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	33	U 33	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	67	U 67	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	500	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	33	U 33	170	1
04688	4-Methylphenol	106-44-5	33	U 33	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	33	U 33	170	1
04688	4-Nitroaniline	100-01-6	67	U 67	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	500	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	500	1
04688	Phenol	108-95-2	17	U 17	170	1

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

Sample Description: SL-001-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SS-0.0-0.5

LLI Sample # SW 6419488
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 07:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL001 SDG#: DE253-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	17 U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	33 U	33	170	1
04688	2,4,6-Trichlorophenol	88-06-2	33 U	33	170	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
4,6-dinitro-2-methylphenol

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.66 U	0.66	1.6	1
10138	Acenaphthylene	208-96-8	0.33 U	0.33	1.6	1
10138	Anthracene	120-12-7	0.33 U	0.33	1.6	1
10138	Benzo(a)anthracene	56-55-3	0.66 U	0.66	1.6	1
10138	Benzo(a)pyrene	50-32-8	0.66 U	0.66	1.6	1
10138	Benzo(b)fluoranthene	205-99-2	1.8	0.66	1.6	1
10138	Benzo(g,h,i)perylene	191-24-2	0.66 U	0.66	1.6	1
10138	Benzo(k)fluoranthene	207-08-9	0.66 U	0.66	1.6	1
10138	Butylbenzylphthalate	85-68-7	5.9 U	5.9	18	1
10138	Di-n-butylphthalate	84-74-2	5.9 U	5.9	18	1
10138	Chrysene	218-01-9	0.97 J	0.33	1.6	1
10138	Dibenz(a,h)anthracene	53-70-3	0.66 U	0.66	1.6	1
10138	Diethylphthalate	84-66-2	5.9 U	5.9	18	1
10138	Dimethylphthalate	131-11-3	5.9 U	5.9	18	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	5.9 J	5.9	18	1
10138	Fluoranthene	206-44-0	1.2 J	0.66	1.6	1
10138	Fluorene	86-73-7	0.66 U	0.66	1.6	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.66 U	0.66	1.6	1
10138	1-Methylnaphthalene	90-12-0	0.66 U	0.66	1.6	1
10138	2-Methylnaphthalene	91-57-6	0.66 U	0.66	1.6	1
10138	Naphthalene	91-20-3	0.66 U	0.66	1.6	1
10138	N-Nitrosodimethylamine	62-75-9	0.66 U	0.66	1.6	1
10138	Di-n-octylphthalate	117-84-0	5.9 U	5.9	18	1
10138	Phenanthrene	85-01-8	0.66 U	0.66	1.6	1
10138	Pyrene	129-00-0	1.1 J	0.66	1.6	1

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	4.7 U	4.7	1
10401	Dalapon	75-99-0	4.4 U	4.4	1
10401	2,4-DB	94-82-6	23 U	23	1
10401	Dicamba	1918-00-9	0.40 U	0.40	1
10401	Dinoseb	88-85-7	0.80 U	0.80	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.6 J	0.80	1
10401	MCPA	94-74-6	76 U	76	1
10401	MCPP (Mecoprop)	93-65-2	75 U	75	1
10401	2,4,5-T	93-76-5	0.082 U	0.082	1
10401	2,4,5-TP	93-72-1	0.075 U	0.075	1

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

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Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL001 SDG#: DE253-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.066 U	0.066	0.17	1
01363	Alpha BHC	319-84-6	0.034 U	0.034	0.17	1
01363	Beta BHC	319-85-7	0.060 U	0.060	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.034 U	0.034	0.17	1
01363	Chlordane	57-74-9	2.4 J	0.80	3.4	1
01363	p,p-DDD	72-54-8	0.066 U	0.066	0.34	1
01363	p,p-DDE	72-55-9	0.70	0.066	0.34	1
01363	p,p-DDT	50-29-3	0.91	0.066	0.34	1
01363	Delta BHC	319-86-8	0.036 U	0.036	0.17	1
01363	Dieldrin	60-57-1	0.066 U	0.066	0.34	1
01363	Endosulfan I	959-98-8	0.044 U	0.044	0.17	1
01363	Endosulfan II	33213-65-9	0.066 U	0.066	0.34	1
01363	Endosulfan Sulfate	1031-07-8	0.066 U	0.066	0.34	1
01363	Endrin	72-20-8	0.066 U	0.066	0.34	1
01363	Endrin Aldehyde	7421-93-4	0.11 U	0.11	0.34	1
01363	Endrin Ketone	53494-70-5	0.066 U	0.066	0.34	1
01363	Heptachlor	76-44-8	0.060 U	0.060	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.073 U	0.073	0.17	1
01363	Methoxychlor	72-43-5	0.34 U	0.34	1.7	1
01363	Mirex	2385-85-5	0.12 U	0.12	0.34	1
01363	Toxaphene	8001-35-2	2.2 U	2.2	6.6	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.3	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.3	1
10225	Aroclor 5460	11126-42-4	3.0 J	1.0	3.3	1
10225	PCB-1016	12674-11-2	0.33 U	0.33	1.7	1
10225	PCB-1221	11104-28-2	0.33 U	0.33	1.7	1
10225	PCB-1232	11141-16-5	0.33 U	0.33	1.7	1
10225	PCB-1242	53469-21-9	0.33 U	0.33	1.7	1
10225	PCB-1248	12672-29-6	0.33 U	0.33	1.7	1
10225	PCB-1254	11097-69-1	0.53 J	0.33	1.7	1
10225	PCB-1260	11096-82-5	1.3 J	0.39	1.7	1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7	1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7	1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,700	5.93	19.6	1
07914	Boron	7440-42-8	5.94	0.353	4.90	1
01650	Calcium	7440-70-2	2,100	2.45	19.6	1
01654	Iron	7439-89-6	18,200	2.56	19.6	1
01656	Lithium	7439-93-2	24.6	0.61	2.0	1
01657	Magnesium	7439-95-4	3,360	0.431	9.80	1
06958	Manganese	7439-96-5	284	0.0353	0.490	1

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

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SSFL Area IV Collocated Soil Sampling
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LLI Sample # SW 6419488
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SL001 SDG#: DE253-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
10145	Phosphorus	7723-14-0	373	0.343	9.80	1
01662	Potassium	7440-09-7	4,040	11.1	49.0	1
01667	Sodium	7440-23-5	87.8 J	5.83	98.0	1
07968	Strontium	7440-24-6	18.8	0.0245	0.490	1
06969	Tin	7440-31-5	3.17 J	0.314	9.80	1
06970	Titanium	7440-32-6	1,120	0.0696	0.980	1
10146	Zirconium	7440-67-7	2.95 J	0.451	4.90	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.122 J	0.0725	0.196	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	3.15	0.0784	0.392	2
06126	Barium	7440-39-3	84.7	0.104	0.392	2
06127	Beryllium	7440-41-7	0.458	0.0157	0.0980	2
06128	Cadmium	7440-43-9	0.170	0.0431	0.0980	2
06131	Chromium	7440-47-3	12.0	0.118	0.392	2
06132	Cobalt	7440-48-4	3.80	0.0196	0.0980	2
06133	Copper	7440-50-8	6.59	0.0784	0.392	2
06135	Lead	7439-92-1	15.0	0.0100	0.196	2
06138	Molybdenum	7439-98-7	0.473	0.0490	0.0980	2
06139	Nickel	7440-02-0	8.35	0.0980	0.392	2
06141	Selenium	7782-49-2	0.145 J	0.0569	0.392	2
06142	Silver	7440-22-4	0.0759 J	0.0139	0.0980	2
06145	Thallium	7440-28-0	0.251	0.0294	0.0980	2
06148	Vanadium	7440-62-2	24.5	0.0216	0.0980	2
06149	Zinc	7440-66-6	86.9	0.549	2.94	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0069 U	0.0069	0.0987	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.80 U	0.80	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.0 U	9.0	30.0	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0	1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.16	0.0100	0.0100	1
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11624	Moisture Content by 160.3	n.a.	0.50 U	0.50	0.50	1

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

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SL001 SDG#: DE253-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified	%	%	%		
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 12:07	Linda M Hartenstine	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/10/2011 07:23	Brian K Graham	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/05/2011 23:41	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 16:24	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 12:42	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/07/2011 07:54	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2

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

Sample Description: SL-001-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SS-0.0-0.5

LLI Sample # SW 6419488
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/20/2011 12:55

Suite 210

Chantilly VA 20151

SL001 SDG#: DE253-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 12:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:30	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 12:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 12:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 12:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:21	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 12:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201A	10/05/2011 16:19	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 17:51	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401A	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Sample Description: SL-002-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA3-SS-0.0-0.5

LLI Sample # SW 6419489
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 08:15

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL002 SDG#: DE253-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	500	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,300	1
04688	Benzoic acid	65-85-0	170	U 170	500	1
04688	Benzyl alcohol	100-51-6	170	U 170	500	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	33	U 33	170	1
04688	4-Chloroaniline	106-47-8	67	U 67	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	33	U 33	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	330	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	33	U 33	170	1
04688	3,5-Dimethylphenol	108-68-9	33	U 33	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	500	1
04688	2,4-Dinitrophenol	51-28-5	330	U 330	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	33	U 33	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	83	J 17	330	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	67	U 67	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	500	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	33	U 33	170	1
04688	4-Methylphenol	106-44-5	33	U 33	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	33	U 33	170	1
04688	4-Nitroaniline	100-01-6	67	U 67	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	500	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	500	1

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

Sample Description: SL-002-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA3-SS-0.0-0.5

LLI Sample # SW 6419489
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 08:15

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL002 SDG#: DE253-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17 U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17 U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	33 U	33	170	1
04688	2,4,6-Trichlorophenol	88-06-2	33 U	33	170	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
4,6-dinitro-2-methylphenol

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.66 U	0.66	1.7	1
10138	Acenaphthylene	208-96-8	0.33 U	0.33	1.7	1
10138	Anthracene	120-12-7	0.36 J	0.33	1.7	1
10138	Benzo(a)anthracene	56-55-3	1.1 J	0.66	1.7	1
10138	Benzo(a)pyrene	50-32-8	1.8	0.66	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	5.4	0.66	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	1.0 J	0.66	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	1.1 J	0.66	1.7	1
10138	Butylbenzylphthalate	85-68-7	5.9 U	5.9	18	1
10138	Di-n-butylphthalate	84-74-2	5.9 U	5.9	18	1
10138	Chrysene	218-01-9	2.9	0.33	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.66 U	0.66	1.7	1
10138	Diethylphthalate	84-66-2	5.9 U	5.9	18	1
10138	Dimethylphthalate	131-11-3	5.9 U	5.9	18	1
10138	Fluoranthene	206-44-0	3.3	0.66	1.7	1
10138	Fluorene	86-73-7	0.66 U	0.66	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80 J	0.66	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.66 U	0.66	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.66 J	0.66	1.7	1
10138	Naphthalene	91-20-3	1.2 J	0.66	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.66 U	0.66	1.7	1
10138	Di-n-octylphthalate	117-84-0	5.9 U	5.9	18	1
10138	Phenanthrene	85-01-8	2.1	0.66	1.7	1
10138	Pyrene	129-00-0	2.9	0.66	1.7	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	2.5	J	1.2	3.6	1
10401	Dalapon	75-99-0	4.4	U	4.4	9.0	1
10401	2,4-DB	94-82-6	3.8	U	3.8	3.8	1
10401	Dicamba	1918-00-9	0.40	U	0.40	1.2	1
10401	Dinoseb	88-85-7	0.80	U	0.80	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.80	U	0.80	1.7	1
10401	MCPA	94-74-6	76	U	76	250	1
10401	MCPP (Mecoprop)	93-65-2	75	U	75	250	1
10401	2,4,5-T	93-76-5	0.082	U	0.082	0.17	1
10401	2,4,5-TP	93-72-1	0.29		0.075	0.17	1

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

Sample Description: SL-002-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA3-SS-0.0-0.5

LLI Sample # SW 6419489
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 08:15

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL002 SDG#: DE253-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.066 U	0.066	0.17	1
01363	Alpha BHC	319-84-6	0.034 U	0.034	0.17	1
01363	Beta BHC	319-85-7	0.060 U	0.060	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.034 U	0.034	0.17	1
01363	Chlordane	57-74-9	1.7 J	0.80	3.4	1
01363	p,p-DDD	72-54-8	0.32 U	0.32	0.34	1
01363	p,p-DDE	72-55-9	1.5	0.066	0.34	1
01363	p,p-DDT	50-29-3	1.4	0.066	0.34	1
01363	Delta BHC	319-86-8	0.036 U	0.036	0.17	1
01363	Dieldrin	60-57-1	0.093 U	0.093	0.34	1
01363	Endosulfan I	959-98-8	0.044 U	0.044	0.17	1
01363	Endosulfan II	33213-65-9	0.068 U	0.068	0.34	1
01363	Endosulfan Sulfate	1031-07-8	0.066 U	0.066	0.34	1
01363	Endrin	72-20-8	0.066 U	0.066	0.34	1
01363	Endrin Aldehyde	7421-93-4	0.17 U	0.17	0.34	1
01363	Endrin Ketone	53494-70-5	0.095 U	0.095	0.34	1
01363	Heptachlor	76-44-8	0.060 U	0.060	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.063 U	0.063	0.17	1
01363	Methoxychlor	72-43-5	0.34 U	0.34	1.7	1
01363	Mirex	2385-85-5	0.066 U	0.066	0.34	1
01363	Toxaphene	8001-35-2	4.6 U	4.6	6.6	1

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

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.3	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.3	1
10225	Aroclor 5460	11126-42-4	3.6	1.0	3.3	1
10225	PCB-1016	12674-11-2	0.33 U	0.33	1.7	1
10225	PCB-1221	11104-28-2	0.33 U	0.33	1.7	1
10225	PCB-1232	11141-16-5	0.33 U	0.33	1.7	1
10225	PCB-1242	53469-21-9	0.33 U	0.33	1.7	1
10225	PCB-1248	12672-29-6	0.33 U	0.33	1.7	1
10225	PCB-1254	11097-69-1	1.3 J	0.33	1.7	1
10225	PCB-1260	11096-82-5	2.9	0.39	1.7	1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7	1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7	1

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,300	5.87	19.4	1
07914	Boron	7440-42-8	5.61	0.350	4.85	1
01650	Calcium	7440-70-2	2,460	2.43	19.4	1
01654	Iron	7439-89-6	19,300	2.53	19.4	1

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



Analysis Report

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

Page 4 of 6

Sample Description: SL-002-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA3-SS-0.0-0.5

LLI Sample # SW 6419489
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 08:15

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL002 SDG#: DE253-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	25.8	0.60	1.9	1
01657	Magnesium	7439-95-4	4,560	0.427	9.71	1
06958	Manganese	7439-96-5	289	0.0350	0.485	1
10145	Phosphorus	7723-14-0	470	0.340	9.71	1
01662	Potassium	7440-09-7	3,470	11.0	48.5	1
01667	Sodium	7440-23-5	74.5 J	5.78	97.1	1
07968	Strontium	7440-24-6	14.1	0.0243	0.485	1
06969	Tin	7440-31-5	2.78 J	0.311	9.71	1
06970	Titanium	7440-32-6	1,130	0.0689	0.971	1
10146	Zirconium	7440-67-7	2.40 J	0.447	4.85	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.141 J	0.0733	0.198	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	2.97	0.0792	0.396	2
06126	Barium	7440-39-3	86.7	0.105	0.396	2
06127	Beryllium	7440-41-7	0.367	0.0158	0.0990	2
06128	Cadmium	7440-43-9	0.217	0.0436	0.0990	2
06131	Chromium	7440-47-3	14.7	0.119	0.396	2
06132	Cobalt	7440-48-4	4.31	0.0198	0.0990	2
06133	Copper	7440-50-8	7.24	0.0792	0.396	2
06135	Lead	7439-92-1	15.5	0.0101	0.198	2
06138	Molybdenum	7439-98-7	0.429	0.0495	0.0990	2
06139	Nickel	7440-02-0	9.40	0.0990	0.396	2
06141	Selenium	7782-49-2	0.132 J	0.0574	0.396	2
06142	Silver	7440-22-4	0.0809 J	0.0141	0.0990	2
06145	Thallium	7440-28-0	0.237	0.0297	0.0990	2
06148	Vanadium	7440-62-2	31.0	0.0218	0.0990	2
06149	Zinc	7440-66-6	106	0.554	2.97	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0069 U	0.0069	0.0982	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4	0.79	0.99	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.0 U	9.0	30.0	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0	1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.44	0.0100	0.0100	1

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

Sample Description: SL-002-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA3-SS-0.0-0.5

LLI Sample # SW 6419489
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 08:15

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL002 SDG#: DE253-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11624	Moisture Content by 160.3	n.a.	0.50 U	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 12:57	Linda M Hartenstine	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/10/2011 07:55	Brian K Graham	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 00:08	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 17:38	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 13:01	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/07/2011 08:05	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2

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

Sample Description: SL-002-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA3-SS-0.0-0.5

LLI Sample # SW 6419489
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 08:15

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL002 SDG#: DE253-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 12:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 12:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 12:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 12:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:22	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 12:42	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201A	10/05/2011 16:42	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 18:06	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401A	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Sample Description: SL-002-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419490
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL025 SDG#: DE253-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	510	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400	1
04688	Benzoic acid	65-85-0	170	U 170	510	1
04688	Benzyl alcohol	100-51-6	170	U 170	510	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170	1
04688	4-Chloroaniline	106-47-8	68	U 68	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170	1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	510	1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	68	U 68	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	510	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	34	U 34	170	1
04688	4-Methylphenol	106-44-5	34	U 34	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	34	U 34	170	1
04688	4-Nitroaniline	100-01-6	68	U 68	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	510	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	510	1
04688	Phenol	108-95-2	17	U 17	170	1

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

Sample Description: SL-002-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419490
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL025 SDG#: DE253-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170	1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
4,6-dinitro-2-methylphenol

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.67	U 0.67	1.7	1
10138	Acenaphthylene	208-96-8	0.34	U 0.34	1.7	1
10138	Anthracene	120-12-7	0.34	U 0.34	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.96	J 0.67	1.7	1
10138	Benzo(a)pyrene	50-32-8	1.9	0.67	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	7.1	0.67	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	1.2	J 0.67	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.67	U 0.67	1.7	1
10138	Butylbenzylphthalate	85-68-7	7.1	J 6.0	18	1
10138	Di-n-butylphthalate	84-74-2	6.0	U 6.0	18	1
10138	Chrysene	218-01-9	2.6	0.34	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.67	U 0.67	1.7	1
10138	Diethylphthalate	84-66-2	6.0	U 6.0	18	1
10138	Dimethylphthalate	131-11-3	6.0	U 6.0	18	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	21	6.0	18	1
10138	Fluoranthene	206-44-0	2.9	0.67	1.7	1
10138	Fluorene	86-73-7	1.7	0.67	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.88	J 0.67	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.67	U 0.67	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.70	J 0.67	1.7	1
10138	Naphthalene	91-20-3	1.3	J 0.67	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.67	U 0.67	1.7	1
10138	Di-n-octylphthalate	117-84-0	11	J 6.0	18	1
10138	Phenanthrene	85-01-8	1.9	0.67	1.7	1
10138	Pyrene	129-00-0	2.5	0.67	1.7	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.2	U	1.2	3.7	1
10401	Dalapon	75-99-0	4.5	U	4.5	9.1	1
10401	2,4-DB	94-82-6	1.7	J	0.63	1.7	1
10401	Dicamba	1918-00-9	0.41	U	0.41	1.2	1
10401	Dinoseb	88-85-7	0.81	U	0.81	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.81	U	0.81	1.7	1
10401	MCPA	94-74-6	77	U	77	250	1
10401	MCPP (Mecoprop)	93-65-2	76	U	76	250	1
10401	2,4,5-T	93-76-5	0.083	U	0.083	0.17	1
10401	2,4,5-TP	93-72-1	0.076	U	0.076	0.17	1

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

Sample Description: SL-002-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419490
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL025 SDG#: DE253-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.067 U	0.067	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.14 J	0.061	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.040 J	0.035	0.17	1
01363	Chlordane	57-74-9	8.0	0.82	3.5	1
01363	p,p-DDD	72-54-8	0.067 U	0.067	0.35	1
01363	p,p-DDE	72-55-9	2.8	0.067	0.35	1
01363	p,p-DDT	50-29-3	2.4	0.34	1.7	5
01363	Delta BHC	319-86-8	0.052 J	0.037	0.17	1
01363	Dieldrin	60-57-1	0.48 U	0.48	0.48	1
01363	Endosulfan I	959-98-8	0.045 U	0.045	0.17	1
01363	Endosulfan II	33213-65-9	0.32 U	0.32	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.31 U	0.31	0.35	1
01363	Endrin	72-20-8	0.067 U	0.067	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.49	0.067	0.35	1
01363	Endrin Ketone	53494-70-5	0.15 U	0.15	0.35	1
01363	Heptachlor	76-44-8	0.061 U	0.061	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.18 U	0.18	0.18	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.27 U	0.27	0.35	1
01363	Toxaphene	8001-35-2	15	2.2	6.7	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	3.3 J	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.7	1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.7	1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.7	1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.7	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.7	1
10225	PCB-1254	11097-69-1	4.3	0.34	1.7	1
10225	PCB-1260	11096-82-5	5.6	0.40	1.7	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.7	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.7	1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,600	6.06	20.0	1
07914	Boron	7440-42-8	10.9	0.361	5.01	1
01650	Calcium	7440-70-2	5,460	2.50	20.0	1
01654	Iron	7439-89-6	25,100	2.61	20.0	1
01656	Lithium	7439-93-2	20.0	0.62	2.0	1

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

Sample Description: SL-002-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419490
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL025 SDG#: DE253-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	5,310	0.441	10.0	1
06958	Manganese	7439-96-5	385	0.0361	0.501	1
10145	Phosphorus	7723-14-0	825	0.350	10.0	1
01662	Potassium	7440-09-7	4,290	11.3	50.1	1
01667	Sodium	7440-23-5	101	5.96	100	1
07968	Strontium	7440-24-6	29.6	0.0250	0.501	1
06969	Tin	7440-31-5	3.06 J	0.320	10.0	1
06970	Titanium	7440-32-6	1,230	0.0711	1.00	1
10146	Zirconium	7440-67-7	6.76	0.461	5.01	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.309	0.0748	0.202	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	6.53	0.0809	0.405	2
06126	Barium	7440-39-3	105	0.107	0.405	2
06127	Beryllium	7440-41-7	0.482	0.0162	0.101	2
06128	Cadmium	7440-43-9	0.345	0.0445	0.101	2
06131	Chromium	7440-47-3	48.8	0.121	0.405	2
06132	Cobalt	7440-48-4	7.83	0.0202	0.101	2
06133	Copper	7440-50-8	11.0	0.0809	0.405	2
06135	Lead	7439-92-1	24.2	0.0103	0.202	2
06138	Molybdenum	7439-98-7	0.747	0.0506	0.101	2
06139	Nickel	7440-02-0	15.8	0.101	0.405	2
06141	Selenium	7782-49-2	0.294 J	0.0587	0.405	2
06142	Silver	7440-22-4	0.0472 J	0.0144	0.101	2
06145	Thallium	7440-28-0	0.219	0.0303	0.101	2
06148	Vanadium	7440-62-2	84.4	0.0222	0.101	2
06149	Zinc	7440-66-6	75.9	0.566	3.03	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0222 J	0.0069	0.0979	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4	0.83	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.2 U	9.2	30.6	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0	1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.04	0.0100	0.0100	1

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

Sample Description: SL-002-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419490
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL025 SDG#: DE253-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11624	Moisture Content by 160.3	n.a.	2.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 13:22	Linda M Hartenstine	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/10/2011 08:29	Brian K Graham	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 00:36	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 18:07	Melissa McDermott	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 18:22	Melissa McDermott	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 13:20	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/07/2011 08:09	Tara L Snyder	1

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

Sample Description: SL-002-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419490
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL025 SDG#: DE253-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 13:06	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:33	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 13:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 13:06	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 13:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:23	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 12:54	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201A	10/05/2011 17:05	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 18:20	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401A	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Sample Description: SL-001-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419491
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	500	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,300	1
04688	Benzoic acid	65-85-0	170	U 170	500	1
04688	Benzyl alcohol	100-51-6	170	U 170	500	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	33	U 33	170	1
04688	4-Chloroaniline	106-47-8	66	U 66	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	33	U 33	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	330	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	33	U 33	170	1
04688	3,5-Dimethylphenol	108-68-9	33	U 33	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	500	1
04688	2,4-Dinitrophenol	51-28-5	330	U 330	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	33	U 33	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	Fluoranthene	206-44-0	36	J 17	170	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	66	U 66	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	500	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	33	U 33	170	1
04688	4-Methylphenol	106-44-5	33	U 33	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	33	U 33	170	1
04688	4-Nitroaniline	100-01-6	66	U 66	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	500	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	500	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419491
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenanthrene	85-01-8	35	J 17	170	1
04688	Phenol	108-95-2	17	U 17	170	1
04688	Pyrene	129-00-0	24	J 17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	33	U 33	170	1
04688	2,4,6-Trichlorophenol	88-06-2	33	U 33	170	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
4,6-dinitro-2-methylphenol

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.67	U 0.67	1.7	1
10138	Acenaphthylene	208-96-8	0.34	U 0.34	1.7	1
10138	Anthracene	120-12-7	0.34	U 0.34	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.67	U 0.67	1.7	1
10138	Benzo(a)pyrene	50-32-8	0.67	U 0.67	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	3.2	0.67	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.67	U 0.67	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.67	U 0.67	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.0	U 6.0	18	1
10138	Di-n-butylphthalate	84-74-2	6.0	U 6.0	18	1
10138	Chrysene	218-01-9	0.49	J 0.34	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.67	U 0.67	1.7	1
10138	Diethylphthalate	84-66-2	6.0	U 6.0	18	1
10138	Dimethylphthalate	131-11-3	6.0	U 6.0	18	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J 6.0	18	1
10138	Fluorene	86-73-7	0.67	U 0.67	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.67	U 0.67	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.67	U 0.67	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.67	U 0.67	1.7	1
10138	Naphthalene	91-20-3	0.67	U 0.67	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.67	U 0.67	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.9	J 6.0	18	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	3.6	U	3.6	3.6	1
10401	Dalapon	75-99-0	4.4	U	4.4	9.1	1
10401	2,4-DB	94-82-6	2.0	U	2.0	2.0	1
10401	Dicamba	1918-00-9	0.40	U	0.40	1.2	1
10401	Dinoseb	88-85-7	0.81	U	0.81	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.81	U	0.81	1.7	1
10401	MCPA	94-74-6	77	U	77	250	1
10401	MCPP (Mecoprop)	93-65-2	76	U	76	250	1
10401	2,4,5-T	93-76-5	0.50	U	0.50	0.50	1
10401	2,4,5-TP	93-72-1	0.076	U	0.076	0.17	

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419491
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Aldrin	309-00-2	0.066 U	0.066	0.17	1
01363	Alpha BHC	319-84-6	0.034 U	0.034	0.17	1
01363	Beta BHC	319-85-7	0.060 U	0.060	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.034 U	0.034	0.17	1
01363	Chlordane	57-74-9	2.0 J	0.81	3.4	1
01363	p,p-DDD	72-54-8	0.066 U	0.066	0.34	1
01363	p,p-DDE	72-55-9	0.52	0.066	0.34	1
01363	p,p-DDT	50-29-3	1.2	0.066	0.34	1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.17	1
01363	Dieldrin	60-57-1	0.16 U	0.16	0.34	1
01363	Endosulfan I	959-98-8	0.044 U	0.044	0.17	1
01363	Endosulfan II	33213-65-9	0.23 U	0.23	0.34	1
01363	Endosulfan Sulfate	1031-07-8	0.066 U	0.066	0.34	1
01363	Endrin	72-20-8	0.066 U	0.066	0.34	1
01363	Endrin Aldehyde	7421-93-4	0.43	0.066	0.34	1
01363	Endrin Ketone	53494-70-5	0.31 U	0.31	0.34	1
01363	Heptachlor	76-44-8	0.060 U	0.060	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.097 U	0.097	0.17	1
01363	Methoxychlor	72-43-5	0.34 U	0.34	1.7	1
01363	Mirex	2385-85-5	0.25 U	0.25	0.34	1
01363	Toxaphene	8001-35-2	13 U	13	13	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.3	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.3	1
10225	Aroclor 5460	11126-42-4	2.4 J	1.0	3.3	1
10225	PCB-1016	12674-11-2	0.33 U	0.33	1.7	1
10225	PCB-1221	11104-28-2	0.33 U	0.33	1.7	1
10225	PCB-1232	11141-16-5	0.33 U	0.33	1.7	1
10225	PCB-1242	53469-21-9	0.33 U	0.33	1.7	1
10225	PCB-1248	12672-29-6	0.33 U	0.33	1.7	1
10225	PCB-1254	11097-69-1	8.0	0.33	1.7	1
10225	PCB-1260	11096-82-5	7.7	0.39	1.7	1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7	1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7	1
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	12,200	6.09	20.1	1
07914	Boron	7440-42-8	7.49	0.362	5.03	1
01650	Calcium	7440-70-2	5,160	2.52	20.1	1
01654	Iron	7439-89-6	22,900	2.63	20.1	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419491
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	16.2	0.62	2.0	1
01657	Magnesium	7439-95-4	5,630	0.443	10.1	1
06958	Manganese	7439-96-5	305	0.0362	0.503	1
10145	Phosphorus	7723-14-0	878	0.352	10.1	1
01662	Potassium	7440-09-7	1,760	11.4	50.3	1
01667	Sodium	7440-23-5	124	5.99	101	1
07968	Strontium	7440-24-6	22.0	0.0252	0.503	1
06969	Tin	7440-31-5	3.00 J	0.322	10.1	1
06970	Titanium	7440-32-6	1,240	0.0715	1.01	1
10146	Zirconium	7440-67-7	12.5	0.463	5.03	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.436	0.0730	0.197	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	7.36	0.0790	0.395	2
06126	Barium	7440-39-3	69.4	0.105	0.395	2
06127	Beryllium	7440-41-7	0.401	0.0158	0.0987	2
06128	Cadmium	7440-43-9	0.294	0.0434	0.0987	2
06131	Chromium	7440-47-3	54.1	0.118	0.395	2
06132	Cobalt	7440-48-4	7.42	0.0197	0.0987	2
06133	Copper	7440-50-8	7.37	0.0790	0.395	2
06135	Lead	7439-92-1	40.1	0.0101	0.197	2
06138	Molybdenum	7439-98-7	0.757	0.0494	0.0987	2
06139	Nickel	7440-02-0	14.0	0.0987	0.395	2
06141	Selenium	7782-49-2	0.257 J	0.0572	0.395	2
06142	Silver	7440-22-4	0.0372 J	0.0140	0.0987	2
06145	Thallium	7440-28-0	0.172	0.0296	0.0987	2
06148	Vanadium	7440-62-2	98.1	0.0217	0.0987	2
06149	Zinc	7440-66-6	72.7	0.553	2.96	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0133 J	0.0070	0.0997	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.6	0.82	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.1 U	9.1	30.2	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0	1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.04	0.0100	0.0100	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419491
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11624	Moisture Content by 160.3	n.a.	0.67	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 02:01	Jennifer R Riggs	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/10/2011 05:14	Brian K Graham	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/05/2011 22:19	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 18:37	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 13:38	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/07/2011 07:31	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419491
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 12:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:18	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 12:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 12:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 12:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:24	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 11:51	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201A	10/05/2011 14:24	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 18:35	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401A	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1



Analysis Report

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

Page 1 of 7

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419492
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,700	17	170	1
04688	Acenaphthylene	208-96-8	1,800	17	170	1
04688	Aniline	62-53-3	1,000	170	500	1
04688	Anthracene	120-12-7	1,800	17	170	1
04688	Benziidine	92-87-5	1,200	U 1,200	3,300	1
04688	Benzo(a)anthracene	56-55-3	1,700	17	170	1
04688	Benzo(a)pyrene	50-32-8	1,700	17	170	1
04688	Benzo(b)fluoranthene	205-99-2	1,700	17	170	1
04688	Benzo(g,h,i)perylene	191-24-2	1,900	17	170	1
04688	Benzo(k)fluoranthene	207-08-9	1,600	17	170	1
04688	Benzoic acid	65-85-0	940	170	500	1
04688	Benzyl alcohol	100-51-6	1,600	170	500	1
04688	4-Bromophenyl-phenylether	101-55-3	1,700	17	170	1
04688	Butylbenzylphthalate	85-68-7	1,800	17	170	1
04688	Di-n-butylphthalate	84-74-2	1,700	17	170	1
04688	Carbazole	86-74-8	1,700	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	1,600	33	170	1
04688	4-Chloroaniline	106-47-8	680	66	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,500	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,500	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,400	17	170	1
04688	2-Chloronaphthalene	91-58-7	1,500	17	170	1
04688	2-Chlorophenol	95-57-8	1,600	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,600	33	170	1
04688	Chrysene	218-01-9	1,700	17	170	1
04688	Dibenz(a,h)anthracene	53-70-3	1,900	17	170	1
04688	Dibenzofuran	132-64-9	1,600	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	1,400	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	1,300	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	1,300	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,000	99	330	1
04688	2,4-Dichlorophenol	120-83-2	1,600	17	170	1
04688	Diethylphthalate	84-66-2	1,600	17	170	1
04688	2,4-Dimethylphenol	105-67-9	1,700	33	170	1
04688	3,5-Dimethylphenol	108-68-9	1,600	33	170	1
04688	Dimethylphthalate	131-11-3	1,600	17	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,000	170	500	1
04688	2,4-Dinitrophenol	51-28-5	1,100	330	990	1
04688	2,4-Dinitrotoluene	121-14-2	1,500	33	170	1
04688	2,6-Dinitrotoluene	606-20-2	1,600	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	1,800	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,900	17	330	1
04688	Fluoranthene	206-44-0	1,800	17	170	1
04688	Fluorene	86-73-7	1,700	17	170	1
04688	Hexachlorobenzene	118-74-1	1,500	17	170	1
04688	Hexachlorobutadiene	87-68-3	1,400	66	170	1
04688	Hexachlorocyclopentadiene	77-47-4	1,600	170	500	1
04688	Hexachloroethane	67-72-1	1,200	17	170	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,900	17	170	1
04688	Isophorone	78-59-1	1,600	17	170	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419492
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,500	17	170	1
04688	2-Methylnaphthalene	91-57-6	1,600	17	170	1
04688	2-Methylphenol	95-48-7	1,600	33	170	1
04688	4-Methylphenol	106-44-5	1,600	33	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,500	17	170	1
04688	2-Nitroaniline	88-74-4	1,600	17	170	1
04688	3-Nitroaniline	99-09-2	1,500	33	170	1
04688	4-Nitroaniline	100-01-6	1,400	66	170	1
04688	Nitrobenzene	98-95-3	1,600	17	170	1
04688	2-Nitrophenol	88-75-5	1,600	17	170	1
04688	4-Nitrophenol	100-02-7	1,500	170	500	1
04688	N-Nitrosodimethylamine	62-75-9	1,400	33	170	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,400	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,600	17	170	1
04688	Pentachlorophenol	87-86-5	760	170	500	1
04688	Phenanthrene	85-01-8	1,700	17	170	1
04688	Phenol	108-95-2	1,600	17	170	1
04688	Pyrene	129-00-0	1,700	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,400	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	1,600	33	170	1
04688	2,4,6-Trichlorophenol	88-06-2	1,800	33	170	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:					
	4,6-dinitro-2-methylphenol					
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	31	0.66	1.7	1
10138	Acenaphthylene	208-96-8	29	0.33	1.7	1
10138	Anthracene	120-12-7	31	0.33	1.7	1
10138	Benzo(a)anthracene	56-55-3	31	0.66	1.7	1
10138	Benzo(a)pyrene	50-32-8	33	0.66	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	35	0.66	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	22	0.66	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	37	0.66	1.7	1
10138	Butylbenzylphthalate	85-68-7	46	6.0	18	1
10138	Di-n-butylphthalate	84-74-2	38	6.0	18	1
10138	Chrysene	218-01-9	33	0.33	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	24	0.66	1.7	1
10138	Diethylphthalate	84-66-2	31	6.0	18	1
10138	Dimethylphthalate	131-11-3	33	6.0	18	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	78	6.0	18	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419492
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM						
10138	Fluoranthene	206-44-0	38	0.66	1.7	1
10138	Fluorene	86-73-7	31	0.66	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	24	0.66	1.7	1
10138	1-Methylnaphthalene	90-12-0	29	0.66	1.7	1
10138	2-Methylnaphthalene	91-57-6	29	0.66	1.7	1
10138	Naphthalene	91-20-3	29	0.66	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	27	0.66	1.7	1
10138	Di-n-octylphthalate	117-84-0	59	6.0	18	1
10138	Phenanthrene	85-01-8	32	0.66	1.7	1
10138	Pyrene	129-00-0	33	0.66	1.7	1
Herbicides SW-846 8151A						
10401	2,4-D	94-75-7	7.8	1.2	3.6	1
10401	Dalapon	75-99-0	4.6 J	4.4	9.0	1
10401	2,4-DB	94-82-6	0.62 U	0.62	1.7	1
10401	Dicamba	1918-00-9	0.40 U	0.40	1.2	1
10401	Dinoseb	88-85-7	0.80 U	0.80	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.80 U	0.80	1.7	1
10401	MCPA	94-74-6	76 U	76	250	1
10401	MCPP (Mecoprop)	93-65-2	75 U	75	250	1
10401	2,4,5-T	93-76-5	0.48	0.082	0.17	1
10401	2,4,5-TP	93-72-1	0.076 U	0.076	0.17	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.20	0.066	0.17	1
01363	Alpha BHC	319-84-6	0.21	0.034	0.17	1
01363	Beta BHC	319-85-7	0.13 J	0.060	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.25	0.034	0.17	1
01363	Chlordane	57-74-9	3.7	0.81	3.4	1
01363	p,p-DDD	72-54-8	0.066 U	0.066	0.34	1
01363	p,p-DDE	72-55-9	0.91	0.066	0.34	1
01363	p,p-DDT	50-29-3	1.5	0.066	0.34	1
01363	Delta BHC	319-86-8	0.26	0.036	0.17	1
01363	Dieldrin	60-57-1	0.47	0.066	0.34	1
01363	Endosulfan I	959-98-8	0.25	0.044	0.17	1
01363	Endosulfan II	33213-65-9	0.56	0.066	0.34	1
01363	Endosulfan Sulfate	1031-07-8	0.47	0.066	0.34	1
01363	Endrin	72-20-8	0.60	0.066	0.34	1
01363	Endrin Aldehyde	7421-93-4	0.43	0.066	0.34	1
01363	Endrin Ketone	53494-70-5	0.57	0.066	0.34	1
01363	Heptachlor	76-44-8	0.23	0.060	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.41	0.034	0.17	1
01363	Methoxychlor	72-43-5	1.9	0.34	1.7	1
01363	Mirex	2385-85-5	0.36	0.066	0.34	1
01363	Toxaphene	8001-35-2	14 U	14	14	1

Various analytes in the calibration check standards bracketing the sample were

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419492
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.3	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.3	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.3	1
10225	PCB-1016	12674-11-2	14	0.33	1.7	1
10225	PCB-1221	11104-28-2	0.33 U	0.33	1.7	1
10225	PCB-1232	11141-16-5	0.33 U	0.33	1.7	1
10225	PCB-1242	53469-21-9	0.33 U	0.33	1.7	1
10225	PCB-1248	12672-29-6	0.33 U	0.33	1.7	1
10225	PCB-1254	11097-69-1	6.6	0.33	1.7	1
10225	PCB-1260	11096-82-5	15	0.39	1.7	1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7	1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7	1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,100	6.03	19.9	1
07914	Boron	7440-42-8	192	0.359	4.98	1
01650	Calcium	7440-70-2	6,500	2.49	19.9	1
01654	Iron	7439-89-6	23,200	2.60	19.9	1
01656	Lithium	7439-93-2	112	0.62	2.0	1
01657	Magnesium	7439-95-4	5,920	0.439	9.97	1
06958	Manganese	7439-96-5	358	0.0359	0.498	1
10145	Phosphorus	7723-14-0	980	0.349	9.97	1
01662	Potassium	7440-09-7	3,000	11.3	49.8	1
01667	Sodium	7440-23-5	1,140	5.93	99.7	1
07968	Strontium	7440-24-6	120	0.0249	0.498	1
06969	Tin	7440-31-5	364	0.319	9.97	1
06970	Titanium	7440-32-6	1,770	0.0708	0.997	1
10146	Zirconium	7440-67-7	106	0.459	4.98	1
		SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.08	0.0745	0.201	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.1	0.0805	0.403	2
06126	Barium	7440-39-3	82.8	0.107	0.403	2
06127	Beryllium	7440-41-7	1.05	0.0161	0.101	2
06128	Cadmium	7440-43-9	1.73	0.0443	0.101	2
06131	Chromium	7440-47-3	72.3	0.121	0.403	2
06132	Cobalt	7440-48-4	64.0	0.0201	0.101	2
06133	Copper	7440-50-8	20.6	0.0805	0.403	2
06135	Lead	7439-92-1	40.2	0.0103	0.201	2
06138	Molybdenum	7439-98-7	15.4	0.0503	0.101	2
06139	Nickel	7440-02-0	28.8	0.101	0.403	2
06141	Selenium	7782-49-2	3.02	0.0584	0.403	2
06142	Silver	7440-22-4	14.0	0.0143	0.101	2
06145	Thallium	7440-28-0	0.711	0.0302	0.101	2

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419492
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6020	mg/kg	mg/kg	mg/kg	
06148	Vanadium	7440-62-2	120	0.0221	0.101	2
06149	Zinc	7440-66-6	85.1	0.564	3.02	2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.141	0.0068	0.0974	1
Wet Chemistry						
		EPA 300.0	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	9.7	0.82	1.0	1
		EPA 314.0	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	578 J	453	1,510	50
		SW-846 7199	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	34.1	1.0	5.0	5
Wet Chemistry						
		EPA 160.3 modified	%	%	%	
11625	Moisture Content by 160.3	n.a.	0.67	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 02:26	Jennifer R Riggs	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/10/2011 05:46	Brian K Graham	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/05/2011 22:46	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 19:07	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 13:57	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419492
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/07/2011 07:42	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 12:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 12:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 12:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 12:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:28	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 12:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	2	11277621201A	10/08/2011 10:55	Elyse P Brunstetter	50
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11278243201A	10/07/2011 11:13	Elyse P Brunstetter	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1

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



Analysis Report

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

Page 7 of 7

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419492
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

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



Analysis Report

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

Page 1 of 6

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419493
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,600	17	170	1
04688	Acenaphthylene	208-96-8	1,800	17	170	1
04688	Aniline	62-53-3	1,000	170	500	1
04688	Anthracene	120-12-7	1,700	17	170	1
04688	Benziidine	92-87-5	1,200	U 1,200	3,400	1
04688	Benzo(a)anthracene	56-55-3	1,700	17	170	1
04688	Benzo(a)pyrene	50-32-8	1,700	17	170	1
04688	Benzo(b)fluoranthene	205-99-2	1,700	17	170	1
04688	Benzo(g,h,i)perylene	191-24-2	1,900	17	170	1
04688	Benzo(k)fluoranthene	207-08-9	1,600	17	170	1
04688	Benzoic acid	65-85-0	670	170	500	1
04688	Benzyl alcohol	100-51-6	1,600	170	500	1
04688	4-Bromophenyl-phenylether	101-55-3	1,700	17	170	1
04688	Butylbenzylphthalate	85-68-7	1,800	17	170	1
04688	Di-n-butylphthalate	84-74-2	1,700	17	170	1
04688	Carbazole	86-74-8	1,700	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	1,700	34	170	1
04688	4-Chloroaniline	106-47-8	630	67	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,500	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,500	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,400	17	170	1
04688	2-Chloronaphthalene	91-58-7	1,400	17	170	1
04688	2-Chlorophenol	95-57-8	1,600	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,500	34	170	1
04688	Chrysene	218-01-9	1,700	17	170	1
04688	Dibenz(a,h)anthracene	53-70-3	1,900	17	170	1
04688	Dibenzofuran	132-64-9	1,600	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	1,400	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	1,400	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	1,400	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,100	100	340	1
04688	2,4-Dichlorophenol	120-83-2	1,600	17	170	1
04688	Diethylphthalate	84-66-2	1,500	17	170	1
04688	2,4-Dimethylphenol	105-67-9	1,600	34	170	1
04688	3,5-Dimethylphenol	108-68-9	1,600	34	170	1
04688	Dimethylphthalate	131-11-3	1,500	17	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	920	170	500	1
04688	2,4-Dinitrophenol	51-28-5	790	J 340	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	1,500	34	170	1
04688	2,6-Dinitrotoluene	606-20-2	1,600	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	1,800	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,800	17	340	1
04688	Fluoranthene	206-44-0	1,700	17	170	1
04688	Fluorene	86-73-7	1,600	17	170	1
04688	Hexachlorobenzene	118-74-1	1,500	17	170	1
04688	Hexachlorobutadiene	87-68-3	1,400	67	170	1
04688	Hexachlorocyclopentadiene	77-47-4	1,400	170	500	1
04688	Hexachloroethane	67-72-1	1,300	17	170	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	2,000	17	170	1
04688	Isophorone	78-59-1	1,600	17	170	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419493
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,500	17	170	1
04688	2-Methylnaphthalene	91-57-6	1,600	17	170	1
04688	2-Methylphenol	95-48-7	1,600	34	170	1
04688	4-Methylphenol	106-44-5	1,500	34	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,600	17	170	1
04688	2-Nitroaniline	88-74-4	1,500	17	170	1
04688	3-Nitroaniline	99-09-2	1,400	34	170	1
04688	4-Nitroaniline	100-01-6	1,100	67	170	1
04688	Nitrobenzene	98-95-3	1,600	17	170	1
04688	2-Nitrophenol	88-75-5	1,600	17	170	1
04688	4-Nitrophenol	100-02-7	1,400	170	500	1
04688	N-Nitrosodimethylamine	62-75-9	1,400	34	170	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,500	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,600	17	170	1
04688	Pentachlorophenol	87-86-5	1,100	170	500	1
04688	Phenanthrene	85-01-8	1,700	17	170	1
04688	Phenol	108-95-2	1,500	17	170	1
04688	Pyrene	129-00-0	1,700	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,500	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	1,600	34	170	1
04688	2,4,6-Trichlorophenol	88-06-2	1,600	34	170	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:					
	4,6-dinitro-2-methylphenol					
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	31	0.66	1.7	1
10138	Acenaphthylene	208-96-8	31	0.33	1.7	1
10138	Anthracene	120-12-7	33	0.33	1.7	1
10138	Benzo(a)anthracene	56-55-3	32	0.66	1.7	1
10138	Benzo(a)pyrene	50-32-8	33	0.66	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	34	0.66	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	24	0.66	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	35	0.66	1.7	1
10138	Butylbenzylphthalate	85-68-7	41	5.9	18	1
10138	Di-n-butylphthalate	84-74-2	38	5.9	18	1
10138	Chrysene	218-01-9	32	0.33	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	27	0.66	1.7	1
10138	Diethylphthalate	84-66-2	33	5.9	18	1
10138	Dimethylphthalate	131-11-3	33	5.9	18	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	63	5.9	18	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419493
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM						
10138	Fluoranthene	206-44-0	35	0.66	1.7	1
10138	Fluorene	86-73-7	33	0.66	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	26	0.66	1.7	1
10138	1-Methylnaphthalene	90-12-0	29	0.66	1.7	1
10138	2-Methylnaphthalene	91-57-6	29	0.66	1.7	1
10138	Naphthalene	91-20-3	30	0.66	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	29	0.66	1.7	1
10138	Di-n-octylphthalate	117-84-0	48	5.9	18	1
10138	Phenanthrene	85-01-8	31	0.66	1.7	1
10138	Pyrene	129-00-0	31	0.66	1.7	1
Herbicides SW-846 8151A						
10401	2,4-D	94-75-7	5.2	1.2	3.6	1
10401	Dalapon	75-99-0	4.4	4.4	9.1	1
10401	2,4-DB	94-82-6	0.62	0.62	1.7	1
10401	Dicamba	1918-00-9	0.40	0.40	1.2	1
10401	Dinoseb	88-85-7	0.83	0.81	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.81	0.81	1.7	1
10401	MCPA	94-74-6	76	76	250	1
10401	MCPP (Mecoprop)	93-65-2	75	75	250	1
10401	2,4,5-T	93-76-5	0.43	0.083	0.17	1
10401	2,4,5-TP	93-72-1	0.076	0.076	0.17	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.22	0.066	0.17	1
01363	Alpha BHC	319-84-6	0.22	0.034	0.17	1
01363	Beta BHC	319-85-7	0.17	0.060	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.28	0.034	0.17	1
01363	Chlordane	57-74-9	12	0.81	3.4	1
01363	p,p-DDD	72-54-8	0.61	0.066	0.34	1
01363	p,p-DDE	72-55-9	1.1	0.066	0.34	1
01363	p,p-DDT	50-29-3	1.6	0.066	0.34	1
01363	Delta BHC	319-86-8	0.28	0.036	0.17	1
01363	Dieldrin	60-57-1	0.52	0.066	0.34	1
01363	Endosulfan I	959-98-8	0.23	0.044	0.17	1
01363	Endosulfan II	33213-65-9	0.43	0.066	0.34	1
01363	Endosulfan Sulfate	1031-07-8	0.58	0.066	0.34	1
01363	Endrin	72-20-8	0.59	0.066	0.34	1
01363	Endrin Aldehyde	7421-93-4	0.56	0.066	0.34	1
01363	Endrin Ketone	53494-70-5	0.56	0.066	0.34	1
01363	Heptachlor	76-44-8	0.25	0.060	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.33	0.034	0.17	1
01363	Methoxychlor	72-43-5	2.1	0.34	1.7	1
01363	Mirex	2385-85-5	0.066	0.066	0.34	1
01363	Toxaphene	8001-35-2	17	17	17	1

Various analytes in the calibration check standards bracketing the sample were

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419493
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.3	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.3	1
10225	Aroclor 5460	11126-42-4	5.3	1.0	3.3	1
10225	PCB-1016	12674-11-2	13	0.33	1.7	1
10225	PCB-1221	11104-28-2	0.33 U	0.33	1.7	1
10225	PCB-1232	11141-16-5	0.33 U	0.33	1.7	1
10225	PCB-1242	53469-21-9	0.33 U	0.33	1.7	1
10225	PCB-1248	12672-29-6	0.33 U	0.33	1.7	1
10225	PCB-1254	11097-69-1	18	0.33	1.7	1
10225	PCB-1260	11096-82-5	15	0.39	1.7	1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7	1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7	1
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,100	6.03	19.9	1
07914	Boron	7440-42-8	195	0.359	4.98	1
01650	Calcium	7440-70-2	6,190	2.49	19.9	1
01654	Iron	7439-89-6	23,600	2.60	19.9	1
01656	Lithium	7439-93-2	113	0.62	2.0	1
01657	Magnesium	7439-95-4	6,010	0.439	9.97	1
06958	Manganese	7439-96-5	366	0.0359	0.498	1
10145	Phosphorus	7723-14-0	971	0.349	9.97	1
01662	Potassium	7440-09-7	3,000	11.3	49.8	1
01667	Sodium	7440-23-5	1,140	5.93	99.7	1
07968	Strontium	7440-24-6	121	0.0249	0.498	1
06969	Tin	7440-31-5	366	0.319	9.97	1
06970	Titanium	7440-32-6	1,790	0.0708	0.997	1
10146	Zirconium	7440-67-7	106	0.459	4.98	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.03	0.0738	0.199	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.4	0.0797	0.399	2
06126	Barium	7440-39-3	82.5	0.106	0.399	2
06127	Beryllium	7440-41-7	1.01	0.0159	0.0997	2
06128	Cadmium	7440-43-9	1.72	0.0439	0.0997	2
06131	Chromium	7440-47-3	70.5	0.120	0.399	2
06132	Cobalt	7440-48-4	63.9	0.0199	0.0997	2
06133	Copper	7440-50-8	20.7	0.0797	0.399	2
06135	Lead	7439-92-1	43.5	0.0102	0.199	2
06138	Molybdenum	7439-98-7	15.4	0.0498	0.0997	2
06139	Nickel	7440-02-0	28.3	0.0997	0.399	2
06141	Selenium	7782-49-2	2.95	0.0578	0.399	2
06142	Silver	7440-22-4	14.0	0.0142	0.0997	2
06145	Thallium	7440-28-0	0.734	0.0299	0.0997	2

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419493
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6020	mg/kg	mg/kg	mg/kg	
06148	Vanadium	7440-62-2	118	0.0219	0.0997	2
06149	Zinc	7440-66-6	85.7	0.558	2.99	2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.164	0.0070	0.0990	1
Wet Chemistry						
		EPA 160.3 modified	%	%	%	
11625	Moisture Content by 160.3	n.a.	0.67	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 02:51	Jennifer R Riggs	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/10/2011 06:18	Brian K Graham	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/05/2011 23:13	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 19:22	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 14:16	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419493
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/07/2011 07:46	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 12:47	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:24	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 12:47	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 12:47	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 12:47	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:29	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Sample Description: SL-001-SA5DS-SS-0.0-0.5 DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419494
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,100	6.09	20.1	1
07914	Boron	7440-42-8	7.71	0.362	5.03	1
01650	Calcium	7440-70-2	5,170	2.52	20.1	1
01654	Iron	7439-89-6	23,200	2.63	20.1	1
01656	Lithium	7439-93-2	16.5	0.62	2.0	1
01657	Magnesium	7439-95-4	5,670	0.443	10.1	1
06958	Manganese	7439-96-5	293	0.0362	0.503	1
10145	Phosphorus	7723-14-0	879	0.352	10.1	1
01662	Potassium	7440-09-7	1,780	11.4	50.3	1
01667	Sodium	7440-23-5	123	5.99	101	1
07968	Strontium	7440-24-6	21.9	0.0252	0.503	1
06969	Tin	7440-31-5	3.10 J	0.322	10.1	1
06970	Titanium	7440-32-6	1,270	0.0715	1.01	1
10146	Zirconium	7440-67-7	13.2	0.463	5.03	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.400	0.0730	0.197	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	7.31	0.0790	0.395	2
06126	Barium	7440-39-3	64.0	0.105	0.395	2
06127	Beryllium	7440-41-7	0.377	0.0158	0.0987	2
06128	Cadmium	7440-43-9	0.231	0.0434	0.0987	2
06131	Chromium	7440-47-3	52.0	0.118	0.395	2
06132	Cobalt	7440-48-4	6.88	0.0197	0.0987	2
06133	Copper	7440-50-8	7.16	0.0790	0.395	2
06135	Lead	7439-92-1	35.9	0.0101	0.197	2
06138	Molybdenum	7439-98-7	0.708	0.0494	0.0987	2
06139	Nickel	7440-02-0	13.0	0.0987	0.395	2
06141	Selenium	7782-49-2	0.243 J	0.0572	0.395	2
06142	Silver	7440-22-4	0.0346 J	0.0140	0.0987	2
06145	Thallium	7440-28-0	0.159	0.0296	0.0987	2
06148	Vanadium	7440-62-2	95.5	0.0217	0.0987	2
06149	Zinc	7440-66-6	70.6	0.553	2.96	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0068 U	0.0068	0.0971	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.5	0.79	0.99	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.1 U	9.1	30.2	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419494
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.06	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11626	28a Moisture Content by 160.3	n.a.	0.62	0.50	0.50	1
The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						
11625	Moisture Content by 160.3	n.a.	0.67	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/07/2011 07:38	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 12:41	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:21	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 12:41	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 12:41	Choon Y Tian	2

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419494
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 12:41	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:26	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 12:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201A	10/05/2011 14:47	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 19:47	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401A	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1



Analysis Report

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Sample Description: SL-001-SA5DS-SS-0.0-0.5 RL MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419495
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04RLR

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Herbicides						
	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	2.5 J	1.2	3.6	1
10401	Dalapon	75-99-0	4.4 U	4.4	9.0	1
10401	2,4-DB	94-82-6	2.0 U	2.0	2.0	1
10401	Dicamba	1918-00-9	0.40 U	0.40	1.2	1
10401	Dinoseb	88-85-7	0.80 U	0.80	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.80 U	0.80	1.7	1
10401	MCPA	94-74-6	76 U	76	250	1
10401	MCPP (Mecoprop)	93-65-2	75 U	75	250	1
10401	2,4,5-T	93-76-5	0.24 U	0.24	0.24	1
10401	2,4,5-TP	93-72-1	0.075 U	0.075	0.17	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs						
	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.13 J	0.066	0.17	1
01363	Alpha BHC	319-84-6	0.14 J	0.034	0.17	1
01363	Beta BHC	319-85-7	0.072 J	0.060	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.21	0.034	0.17	1
01363	Chlordane	57-74-9	10	0.81	3.4	1
01363	p,p-DDD	72-54-8	0.066 U	0.066	0.34	1
01363	p,p-DDE	72-55-9	0.83	0.066	0.34	1
01363	p,p-DDT	50-29-3	1.7	0.066	0.34	1
01363	Delta BHC	319-86-8	0.18	0.036	0.17	1
01363	Dieldrin	60-57-1	0.40	0.066	0.34	1
01363	Endosulfan I	959-98-8	0.16 J	0.044	0.17	1
01363	Endosulfan II	33213-65-9	0.45	0.066	0.34	1
01363	Endosulfan Sulfate	1031-07-8	0.43	0.066	0.34	1
01363	Endrin	72-20-8	0.31 J	0.066	0.34	1
01363	Endrin Aldehyde	7421-93-4	0.52	0.066	0.34	1
01363	Endrin Ketone	53494-70-5	0.29 J	0.066	0.34	1
01363	Heptachlor	76-44-8	0.16 J	0.060	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.22	0.034	0.17	1
01363	Methoxychlor	72-43-5	2.2	0.34	1.7	1
01363	Mirex	2385-85-5	0.066 U	0.066	0.34	1
01363	Toxaphene	8001-35-2	16 U	16	16	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.3	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.3	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.3	1
10225	PCB-1016	12674-11-2	1.6 J	0.33	1.7	1
10225	PCB-1221	11104-28-2	0.33 U	0.33	1.7	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 RL MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419495
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04RLR

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.33 U	0.33	1.7	1
10225	PCB-1242	53469-21-9	0.33 U	0.33	1.7	1
10225	PCB-1248	12672-29-6	0.33 U	0.33	1.7	1
10225	PCB-1254	11097-69-1	2.1	0.33	1.7	1
10225	PCB-1260	11096-82-5	5.5	0.39	1.7	1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7	1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11625	Moisture Content by 160.3	n.a.	0.67	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 01:03	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 21:20	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 14:35	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

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



Analysis Report

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Sample Description: SL-001-SA5DS-SS-0.0-0.5 RL LCS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419496
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04RLQ

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Herbicides						
	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	5.3	1.2	3.6	1
10401	Dalapon	75-99-0	8.0 J	4.4	9.0	1
10401	2,4-DB	94-82-6	1.9	0.62	1.7	1
10401	Dicamba	1918-00-9	1.1 J	0.40	1.2	1
10401	Dinoseb	88-85-7	0.30 J	0.10	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	2.1	0.80	1.7	1
10401	MCPA	94-74-6	170 J	76	250	1
10401	MCPP (Mecoprop)	93-65-2	150 J	75	250	1
10401	2,4,5-T	93-76-5	0.17	0.082	0.17	1
10401	2,4,5-TP	93-72-1	0.16 J	0.075	0.17	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs						
	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.16 J	0.066	0.17	1
01363	Alpha BHC	319-84-6	0.13 J	0.034	0.17	1
01363	Beta BHC	319-85-7	0.18	0.060	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.15 J	0.034	0.17	1
01363	Chlordane	57-74-9	0.80 U	0.80	3.4	1
01363	p,p-DDD	72-54-8	0.37	0.066	0.34	1
01363	p,p-DDE	72-55-9	0.40	0.066	0.34	1
01363	p,p-DDT	50-29-3	0.20 J	0.066	0.34	1
01363	Delta BHC	319-86-8	0.18	0.036	0.17	1
01363	Dieldrin	60-57-1	0.18 J	0.066	0.34	1
01363	Endosulfan I	959-98-8	0.15 J	0.044	0.17	1
01363	Endosulfan II	33213-65-9	0.21 J	0.066	0.34	1
01363	Endosulfan Sulfate	1031-07-8	0.18 J	0.066	0.34	1
01363	Endrin	72-20-8	0.29 J	0.066	0.34	1
01363	Endrin Aldehyde	7421-93-4	0.27 J	0.066	0.34	1
01363	Endrin Ketone	53494-70-5	0.25 J	0.066	0.34	1
01363	Heptachlor	76-44-8	0.17	0.060	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.18	0.034	0.17	1
01363	Methoxychlor	72-43-5	0.86 J	0.34	1.7	1
01363	Mirex	2385-85-5	0.066 U	0.066	0.34	1
01363	Toxaphene	8001-35-2	2.2 U	2.2	6.6	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.3	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.3	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.3	1
10225	PCB-1016	12674-11-2	1.7 J	0.33	1.7	1
10225	PCB-1221	11104-28-2	0.33 U	0.33	1.7	1
10225	PCB-1232	11141-16-5	0.33 U	0.33	1.7	1
10225	PCB-1242	53469-21-9	0.33 U	0.33	1.7	1
10225	PCB-1248	12672-29-6	0.33 U	0.33	1.7	1
10225	PCB-1254	11097-69-1	0.33 U	0.33	1.7	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 RL LCS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419496
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL021 SDG#: DE253-04RLQ

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	PCB-1260	11096-82-5	1.9	0.39	1.7	1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7	1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 02:25	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 16:39	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 14:53	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1

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

Sample Description: SL-026-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419497
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL026 SDG#: DE253-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	8,300	U 8,300	25,000	5
04688	Benzidine	92-87-5	58,000	U 58,000	170,000	5
04688	Benzo(a)pyrene	50-32-8	1,400	J 830	8,300	5
04688	Benzo(b)fluoranthene	205-99-2	1,400	J 830	8,300	5
04688	Benzo(g,h,i)perylene	191-24-2	1,100	J 830	8,300	5
04688	Benzoic acid	65-85-0	8,300	U 8,300	25,000	5
04688	Benzyl alcohol	100-51-6	8,300	U 8,300	25,000	5
04688	4-Bromophenyl-phenylether	101-55-3	830	U 830	8,300	5
04688	Carbazole	86-74-8	830	U 830	8,300	5
04688	4-Chloro-3-methylphenol	59-50-7	1,700	U 1,700	8,300	5
04688	4-Chloroaniline	106-47-8	3,300	U 3,300	8,300	5
04688	bis(2-Chloroethoxy)methane	111-91-1	830	U 830	8,300	5
04688	bis(2-Chloroethyl)ether	111-44-4	830	U 830	8,300	5
04688	bis(2-Chloroisopropyl)ether	39638-32-9	830	U 830	8,300	5
04688	2-Chloronaphthalene	91-58-7	830	U 830	8,300	5
04688	2-Chlorophenol	95-57-8	830	U 830	8,300	5
04688	4-Chlorophenyl-phenylether	7005-72-3	1,700	U 1,700	8,300	5
04688	Chrysene	218-01-9	1,500	J 830	8,300	5
04688	Dibenzofuran	132-64-9	830	U 830	8,300	5
04688	1,2-Dichlorobenzene	95-50-1	830	U 830	8,300	5
04688	1,3-Dichlorobenzene	541-73-1	830	U 830	8,300	5
04688	1,4-Dichlorobenzene	106-46-7	830	U 830	8,300	5
04688	3,3'-Dichlorobenzidine	91-94-1	5,000	U 5,000	17,000	5
04688	2,4-Dichlorophenol	120-83-2	830	U 830	8,300	5
04688	2,4-Dimethylphenol	105-67-9	1,700	U 1,700	8,300	5
04688	3,5-Dimethylphenol	108-68-9	1,700	U 1,700	8,300	5
04688	4,6-Dinitro-2-methylphenol	534-52-1	8,300	U 8,300	25,000	5
04688	2,4-Dinitrophenol	51-28-5	17,000	U 17,000	50,000	5
04688	2,4-Dinitrotoluene	121-14-2	1,700	U 1,700	8,300	5
04688	2,6-Dinitrotoluene	606-20-2	830	U 830	8,300	5
04688	1,2-Diphenylhydrazine	122-66-7	830	U 830	8,300	5
04688	Fluoranthene	206-44-0	1,100	J 830	8,300	5
04688	Hexachlorobenzene	118-74-1	830	U 830	8,300	5
04688	Hexachlorobutadiene	87-68-3	3,300	U 3,300	8,300	5
04688	Hexachlorocyclopentadiene	77-47-4	8,300	U 8,300	25,000	5
04688	Hexachloroethane	67-72-1	830	U 830	8,300	5
04688	Isophorone	78-59-1	830	U 830	8,300	5
04688	2-Methylphenol	95-48-7	1,700	U 1,700	8,300	5
04688	4-Methylphenol	106-44-5	1,700	U 1,700	8,300	5
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	830	U 830	8,300	5
04688	3-Nitroaniline	99-09-2	1,700	U 1,700	8,300	5
04688	4-Nitroaniline	100-01-6	3,300	U 3,300	8,300	5
04688	Nitrobenzene	98-95-3	830	U 830	8,300	5
04688	2-Nitrophenol	88-75-5	830	U 830	8,300	5
04688	4-Nitrophenol	100-02-7	8,300	U 8,300	25,000	5
04688	N-Nitroso-di-n-propylamine	621-64-7	830	U 830	8,300	5
04688	N-Nitrosodiphenylamine	86-30-6	830	U 830	8,300	5

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

Sample Description: SL-026-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419497
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL026 SDG#: DE253-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	8,300	U 8,300	25,000	5
04688	Phenol	108-95-2	830	U 830	8,300	5
04688	Pyrene	129-00-0	1,300	J 830	8,300	5
04688	1,2,4-Trichlorobenzene	120-82-1	830	U 830	8,300	5
04688	2,4,5-Trichlorophenol	95-95-4	1,700	U 1,700	8,300	5
04688	2,4,6-Trichlorophenol	88-06-2	1,700	U 1,700	8,300	5
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
4,6-dinitro-2-methylphenol						
Reporting limits were raised due to interference from the sample matrix.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	11	0.67	1.7	1
10138	Acenaphthylene	208-96-8	0.48 J	0.33	1.7	1
10138	Anthracene	120-12-7	25	0.33	1.7	1
10138	Benzo(a)anthracene	56-55-3	180	0.67	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	150	0.67	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.0 U	6.0	18	1
10138	Di-n-butylphthalate	84-74-2	6.0 U	6.0	18	1
10138	Dibenz(a,h)anthracene	53-70-3	27	0.67	1.7	1
10138	Diethylphthalate	84-66-2	6.0 U	6.0	18	1
10138	Dimethylphthalate	131-11-3	6.0 U	6.0	18	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.0 J	6.0	18	1
10138	Fluorene	86-73-7	6.7	0.67	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	78	0.67	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.67 U	0.67	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.67 U	0.67	1.7	1
10138	Naphthalene	91-20-3	0.99 J	0.67	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.67 U	0.67	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.0 U	6.0	18	1
10138	Phenanthrene	85-01-8	99	0.67	1.7	1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.7 U	1.7	3.6	1
10401	Dalapon	75-99-0	4.4 U	4.4	9.1	1
10401	2,4-DB	94-82-6	5.9	0.63	1.7	1
10401	Dicamba	1918-00-9	0.40 U	0.40	1.2	1
10401	Dinoseb	88-85-7	0.86 J	0.81	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.81 U	0.81	1.7	1
10401	MCPA	94-74-6	77 U	77	250	1
10401	MCPP (Mecoprop)	93-65-2	76 U	76	250	1
10401	2,4,5-T	93-76-5	0.42	0.083	0.17	1
10401	2,4,5-TP	93-72-1	0.076 U	0.076	0.17	1

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

Sample Description: SL-026-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419497
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL026 SDG#: DE253-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	6.7	U 6.7	17	100
01363	Alpha BHC	319-84-6	3.4	U 3.4	17	100
01363	Beta BHC	319-85-7	6.1	U 6.1	17	100
01363	Gamma BHC - Lindane	58-89-9	3.4	U 3.4	17	100
01363	Chlordane	57-74-9	510	U 510	510	100
01363	p,p-DDD	72-54-8	6.7	U 6.7	34	100
01363	p,p-DDE	72-55-9	270	U 270	270	500
01363	p,p-DDT	50-29-3	33	U 33	170	500
01363	Delta BHC	319-86-8	3.7	U 3.7	17	100
01363	Dieldrin	60-57-1	50	U 50	50	100
01363	Endosulfan I	959-98-8	4.5	U 4.5	17	100
01363	Endosulfan II	33213-65-9	46	U 46	46	100
01363	Endosulfan Sulfate	1031-07-8	6.7	U 6.7	34	100
01363	Endrin	72-20-8	59	U 59	59	100
01363	Endrin Aldehyde	7421-93-4	28	U 28	34	100
01363	Endrin Ketone	53494-70-5	6.7	U 6.7	34	100
01363	Heptachlor	76-44-8	6.1	U 6.1	17	100
01363	Heptachlor Epoxide	1024-57-3	83	U 83	83	100
01363	Methoxychlor	72-43-5	34	U 34	170	100
01363	Mirex	2385-85-5	31	U 31	34	100
01363	Toxaphene	8001-35-2	1,400	U 1,400	1,400	100
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	100	U 100	330	100
10225	Aroclor 5442	12642-23-8	100	U 100	330	100
10225	Aroclor 5460	11126-42-4	100	U 100	330	100
10225	PCB-1016	12674-11-2	33	U 33	170	100
10225	PCB-1221	11104-28-2	33	U 33	170	100
10225	PCB-1232	11141-16-5	33	U 33	170	100
10225	PCB-1242	53469-21-9	33	U 33	170	100
10225	PCB-1248	12672-29-6	33	U 33	170	100
10225	PCB-1254	11097-69-1	1,500	U 33	170	100
10225	PCB-1260	11096-82-5	40	U 40	170	100
10225	PCB-1262	37324-23-5	33	U 33	170	100
10225	PCB-1268	11100-14-4	33	U 33	170	100
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	9,970	5.96	19.7	1
07914	Boron	7440-42-8	5.50	0.354	4.92	1

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

Sample Description: SL-026-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419497
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL026 SDG#: DE253-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	3,460	2.46	19.7	1
01654	Iron	7439-89-6	18,300	2.57	19.7	1
01656	Lithium	7439-93-2	13.8	0.61	2.0	1
01657	Magnesium	7439-95-4	4,310	0.433	9.85	1
06958	Manganese	7439-96-5	227	0.0354	0.492	1
10145	Phosphorus	7723-14-0	472	0.345	9.85	1
01662	Potassium	7440-09-7	2,570	11.1	49.2	1
01667	Sodium	7440-23-5	199	5.86	98.5	1
07968	Strontium	7440-24-6	30.7	0.0246	0.492	1
06969	Tin	7440-31-5	2.20 J	0.315	9.85	1
06970	Titanium	7440-32-6	1,100	0.0699	0.985	1
10146	Zirconium	7440-67-7	2.89 J	0.453	4.92	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.102 J	0.0736	0.199	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	3.27	0.0795	0.398	2
06126	Barium	7440-39-3	101	0.105	0.398	2
06127	Beryllium	7440-41-7	0.275	0.0159	0.0994	2
06128	Cadmium	7440-43-9	0.152	0.0437	0.0994	2
06131	Chromium	7440-47-3	24.8	0.119	0.398	2
06132	Cobalt	7440-48-4	6.30	0.0199	0.0994	2
06133	Copper	7440-50-8	11.9	0.0795	0.398	2
06135	Lead	7439-92-1	12.1	0.0101	0.199	2
06138	Molybdenum	7439-98-7	0.404	0.0497	0.0994	2
06139	Nickel	7440-02-0	20.0	0.0994	0.398	2
06141	Selenium	7782-49-2	0.154 J	0.0577	0.398	2
06142	Silver	7440-22-4	0.0205 J	0.0141	0.0994	2
06145	Thallium	7440-28-0	0.186	0.0298	0.0994	2
06148	Vanadium	7440-62-2	63.9	0.0219	0.0994	2
06149	Zinc	7440-66-6	58.8	0.557	2.98	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0068 U	0.0068	0.0973	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.83 U	0.83	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.1 U	9.1	30.4	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.34 J	0.20	1.0	1

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

Sample Description: SL-026-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419497
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL026 SDG#: DE253-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry			SW-846 9045C modified	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.84	0.0100	0.0100	1
Wet Chemistry			EPA 160.3 modified	%	%	
11624	Moisture Content by 160.3	n.a.	1.4	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 13:46	Linda M Hartenstine	5
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/10/2011 09:00	Brian K Graham	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 02:53	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 23:41	Melissa McDermott	100
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 23:55	Melissa McDermott	500
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 15:12	Jessica L Miller	100
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1

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

Sample Description: SL-026-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419497
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:35

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL026 SDG#: DE253-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/07/2011 08:13	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 13:09	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:34	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 13:09	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 13:09	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 13:09	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:32	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 13:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201A	10/05/2011 17:28	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 20:08	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401A	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1



Analysis Report

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

Page 1 of 6

Sample Description: SL-027-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-027-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419498
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL027 SDG#: DE253-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	840	U 840	2,500	5
04688	Benzidine	92-87-5	5,800	U 5,800	17,000	5
04688	Benzoic acid	65-85-0	840	U 840	2,500	5
04688	Benzyl alcohol	100-51-6	840	U 840	2,500	5
04688	4-Bromophenyl-phenylether	101-55-3	84	U 84	840	5
04688	Carbazole	86-74-8	84	U 84	840	5
04688	4-Chloro-3-methylphenol	59-50-7	170	U 170	840	5
04688	4-Chloroaniline	106-47-8	330	U 330	840	5
04688	bis(2-Chloroethoxy)methane	111-91-1	84	U 84	840	5
04688	bis(2-Chloroethyl)ether	111-44-4	84	U 84	840	5
04688	bis(2-Chloroisopropyl)ether	39638-32-9	84	U 84	840	5
04688	2-Chloronaphthalene	91-58-7	84	U 84	840	5
04688	2-Chlorophenol	95-57-8	84	U 84	840	5
04688	4-Chlorophenyl-phenylether	7005-72-3	170	U 170	840	5
04688	Dibenzofuran	132-64-9	84	U 84	840	5
04688	1,2-Dichlorobenzene	95-50-1	84	U 84	840	5
04688	1,3-Dichlorobenzene	541-73-1	84	U 84	840	5
04688	1,4-Dichlorobenzene	106-46-7	84	U 84	840	5
04688	3,3'-Dichlorobenzidine	91-94-1	500	U 500	1,700	5
04688	2,4-Dichlorophenol	120-83-2	84	U 84	840	5
04688	2,4-Dimethylphenol	105-67-9	170	U 170	840	5
04688	3,5-Dimethylphenol	108-68-9	170	U 170	840	5
04688	4,6-Dinitro-2-methylphenol	534-52-1	840	U 840	2,500	5
04688	2,4-Dinitrophenol	51-28-5	1,700	U 1,700	5,000	5
04688	2,4-Dinitrotoluene	121-14-2	170	U 170	840	5
04688	2,6-Dinitrotoluene	606-20-2	84	U 84	840	5
04688	1,2-Diphenylhydrazine	122-66-7	84	U 84	840	5
04688	Hexachlorobenzene	118-74-1	84	U 84	840	5
04688	Hexachlorobutadiene	87-68-3	330	U 330	840	5
04688	Hexachlorocyclopentadiene	77-47-4	840	U 840	2,500	5
04688	Hexachloroethane	67-72-1	84	U 84	840	5
04688	Isophorone	78-59-1	84	U 84	840	5
04688	2-Methylphenol	95-48-7	170	U 170	840	5
04688	4-Methylphenol	106-44-5	170	U 170	840	5
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	84	U 84	840	5
04688	3-Nitroaniline	99-09-2	170	U 170	840	5
04688	4-Nitroaniline	100-01-6	330	U 330	840	5
04688	Nitrobenzene	98-95-3	84	U 84	840	5
04688	2-Nitrophenol	88-75-5	84	U 84	840	5
04688	4-Nitrophenol	100-02-7	840	U 840	2,500	5
04688	N-Nitroso-di-n-propylamine	621-64-7	84	U 84	840	5
04688	N-Nitrosodiphenylamine	86-30-6	84	U 84	840	5
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	840	U 840	2,500	5
04688	Phenol	108-95-2	84	U 84	840	5

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

Sample Description: SL-027-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-027-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419498
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL027 SDG#: DE253-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	84	U 84	840	5
04688	2,4,5-Trichlorophenol	95-95-4	170	U 170	840	5
04688	2,4,6-Trichlorophenol	88-06-2	170	U 170	840	5

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
4,6-dinitro-2-methylphenol

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.3	U 3.3	8.4	5
10138	Acenaphthylene	208-96-8	1.7	U 1.7	8.4	5
10138	Anthracene	120-12-7	1.7	U 1.7	8.4	5
10138	Benzo(a)anthracene	56-55-3	3.9	J 3.3	8.4	5
10138	Benzo(a)pyrene	50-32-8	3.3	U 3.3	8.4	5
10138	Benzo(b)fluoranthene	205-99-2	34	U 3.3	8.4	5
10138	Benzo(g,h,i)perylene	191-24-2	3.3	U 3.3	8.4	5
10138	Benzo(k)fluoranthene	207-08-9	3.3	U 3.3	8.4	5
10138	Butylbenzylphthalate	85-68-7	30	U 30	90	5
10138	Di-n-butylphthalate	84-74-2	30	U 30	90	5
10138	Chrysene	218-01-9	20	U 1.7	8.4	5
10138	Dibenz(a,h)anthracene	53-70-3	3.3	U 3.3	8.4	5
10138	Diethylphthalate	84-66-2	30	U 30	90	5
10138	Dimethylphthalate	131-11-3	30	U 30	90	5
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	33	J 30	90	5
10138	Fluoranthene	206-44-0	3.3	U 3.3	8.4	5
10138	Fluorene	86-73-7	3.3	U 3.3	8.4	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.3	U 3.3	8.4	5
10138	1-Methylnaphthalene	90-12-0	3.3	U 3.3	8.4	5
10138	2-Methylnaphthalene	91-57-6	3.3	U 3.3	8.4	5
10138	Naphthalene	91-20-3	3.3	U 3.3	8.4	5
10138	N-Nitrosodimethylamine	62-75-9	3.3	U 3.3	8.4	5
10138	Di-n-octylphthalate	117-84-0	30	U 30	90	5
10138	Phenanthrene	85-01-8	4.5	J 3.3	8.4	5
10138	Pyrene	129-00-0	7.4	J 3.3	8.4	5

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

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.2	U	1.2	3.6	1
10401	Dalapon	75-99-0	4.4	U	4.4	9.1	1
10401	2,4-DB	94-82-6	4.7		0.62	1.7	1
10401	Dicamba	1918-00-9	0.40	U	0.40	1.2	1
10401	Dinoseb	88-85-7	0.81	U	0.81	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.81	U	0.81	1.7	1
10401	MCPA	94-74-6	77	U	77	250	1
10401	MCPP (Mecoprop)	93-65-2	76	U	76	250	1
10401	2,4,5-T	93-76-5	0.083	U	0.083	0.17	1

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



Analysis Report

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Page 3 of 6

Sample Description: SL-027-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-027-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419498
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL027 SDG#: DE253-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Herbicides						
	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4,5-TP	93-72-1	0.076 U	0.076	0.17	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs						
	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.33 U	0.33	0.84	5
01363	Alpha BHC	319-84-6	0.17 U	0.17	0.84	5
01363	Beta BHC	319-85-7	0.30 U	0.30	0.84	5
01363	Gamma BHC - Lindane	58-89-9	0.17 U	0.17	0.84	5
01363	Chlordane	57-74-9	4.0 U	4.0	17	5
01363	p,p-DDD	72-54-8	0.70 U	0.70	1.7	5
01363	p,p-DDE	72-55-9	1.1 J	0.33	1.7	5
01363	p,p-DDT	50-29-3	1.3 J	0.33	1.7	5
01363	Delta BHC	319-86-8	0.18 U	0.18	0.84	5
01363	Dieldrin	60-57-1	0.33 U	0.33	1.7	5
01363	Endosulfan I	959-98-8	0.22 U	0.22	0.84	5
01363	Endosulfan II	33213-65-9	0.33 U	0.33	1.7	5
01363	Endosulfan Sulfate	1031-07-8	0.33 U	0.33	1.7	5
01363	Endrin	72-20-8	0.33 U	0.33	1.7	5
01363	Endrin Aldehyde	7421-93-4	0.41 U	0.41	1.7	5
01363	Endrin Ketone	53494-70-5	0.33 U	0.33	1.7	5
01363	Heptachlor	76-44-8	0.30 U	0.30	0.84	5
01363	Heptachlor Epoxide	1024-57-3	0.17 U	0.17	0.84	5
01363	Methoxychlor	72-43-5	1.9 U	1.9	8.4	5
01363	Mirex	2385-85-5	2.8 U	2.8	2.8	5
01363	Toxaphene	8001-35-2	50 U	50	50	5
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.3	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.3	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.3	1
10225	PCB-1016	12674-11-2	0.33 U	0.33	1.7	1
10225	PCB-1221	11104-28-2	0.33 U	0.33	1.7	1
10225	PCB-1232	11141-16-5	0.33 U	0.33	1.7	1
10225	PCB-1242	53469-21-9	0.33 U	0.33	1.7	1
10225	PCB-1248	12672-29-6	0.33 U	0.33	1.7	1
10225	PCB-1254	11097-69-1	0.33 U	0.33	1.7	1
10225	PCB-1260	11096-82-5	0.39 U	0.39	1.7	1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7	1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7	1
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	

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

Sample Description: SL-027-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-027-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419498
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL027 SDG#: DE253-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,800	5.95	19.7	1
07914	Boron	7440-42-8	9.43	0.354	4.91	1
01650	Calcium	7440-70-2	8,000	2.46	19.7	1
01654	Iron	7439-89-6	27,200	12.8	98.3	5
01656	Lithium	7439-93-2	30.5	0.61	2.0	1
01657	Magnesium	7439-95-4	7,140	0.432	9.83	1
06958	Manganese	7439-96-5	317	0.0354	0.491	1
10145	Phosphorus	7723-14-0	655	0.344	9.83	1
01662	Potassium	7440-09-7	3,940	11.1	49.1	1
01667	Sodium	7440-23-5	146	5.85	98.3	1
07968	Strontium	7440-24-6	21.6	0.0246	0.491	1
06969	Tin	7440-31-5	2.63 J	0.314	9.83	1
06970	Titanium	7440-32-6	1,260	0.0698	0.983	1
10146	Zirconium	7440-67-7	7.02	0.452	4.91	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.194 J	0.0734	0.198	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.79	0.0794	0.397	2
06126	Barium	7440-39-3	128	0.105	0.397	2
06127	Beryllium	7440-41-7	0.440	0.0159	0.0992	2
06128	Cadmium	7440-43-9	0.354	0.0437	0.0992	2
06131	Chromium	7440-47-3	44.5	0.119	0.397	2
06132	Cobalt	7440-48-4	10.7	0.0198	0.0992	2
06133	Copper	7440-50-8	14.1	0.0794	0.397	2
06135	Lead	7439-92-1	10.1	0.0101	0.198	2
06138	Molybdenum	7439-98-7	0.413	0.0496	0.0992	2
06139	Nickel	7440-02-0	20.6	0.0992	0.397	2
06141	Selenium	7782-49-2	0.282 J	0.0576	0.397	2
06142	Silver	7440-22-4	0.161	0.0141	0.0992	2
06145	Thallium	7440-28-0	0.367	0.0298	0.0992	2
06148	Vanadium	7440-62-2	95.0	0.0218	0.0992	2
06149	Zinc	7440-66-6	104	0.556	2.98	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0069 U	0.0069	0.0988	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5	0.80	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.1 U	9.1	30.4	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0	1

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

Sample Description: SL-027-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-027-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419498
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL027 SDG#: DE253-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.41	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	Moisture Content by 160.3	n.a.	1.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 14:11	Linda M Hartenstine	5
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/11/2011 02:49	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 03:20	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/12/2011 03:04	Melissa McDermott	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 15:31	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 17:39	John P Hook	5
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1

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

Sample Description: SL-027-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-027-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419498
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:25

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Chantilly VA 20151

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL027 SDG#: DE253-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/07/2011 08:17	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 13:12	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:36	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 13:12	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 13:12	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 13:12	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:34	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 13:20	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201A	10/05/2011 17:51	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 20:16	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401A	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Sample Description: SL-028-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419499
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL028 SDG#: DE253-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	500	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,300	1
04688	Benzoic acid	65-85-0	170	U 170	500	1
04688	Benzyl alcohol	100-51-6	170	U 170	500	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	33	U 33	170	1
04688	4-Chloroaniline	106-47-8	67	U 67	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	33	U 33	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	330	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	33	U 33	170	1
04688	3,5-Dimethylphenol	108-68-9	33	U 33	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	500	1
04688	2,4-Dinitrophenol	51-28-5	330	U 330	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	33	U 33	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	67	U 67	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	500	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	33	U 33	170	1
04688	4-Methylphenol	106-44-5	33	U 33	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	33	U 33	170	1
04688	4-Nitroaniline	100-01-6	67	U 67	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	500	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	500	1
04688	Phenol	108-95-2	18	J 17	170	1

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

Sample Description: SL-028-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419499
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL028 SDG#: DE253-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	33	U 33	170	1
04688	2,4,6-Trichlorophenol	88-06-2	33	U 33	170	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
4,6-dinitro-2-methylphenol

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.66	U 0.66	1.7	1
10138	Acenaphthylene	208-96-8	0.33	U 0.33	1.7	1
10138	Anthracene	120-12-7	0.33	U 0.33	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.80	J 0.66	1.7	1
10138	Benzo(a)pyrene	50-32-8	1.1	J 0.66	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	1.8	0.66	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.66	U 0.66	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.72	J 0.66	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.0	U 6.0	18	1
10138	Di-n-butylphthalate	84-74-2	6.0	U 6.0	18	1
10138	Chrysene	218-01-9	1.1	J 0.33	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.66	U 0.66	1.7	1
10138	Diethylphthalate	84-66-2	6.0	U 6.0	18	1
10138	Dimethylphthalate	131-11-3	6.0	U 6.0	18	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.0	U 6.0	18	1
10138	Fluoranthene	206-44-0	0.86	J 0.66	1.7	1
10138	Fluorene	86-73-7	0.66	U 0.66	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.66	U 0.66	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.66	U 0.66	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.66	U 0.66	1.7	1
10138	Naphthalene	91-20-3	0.66	U 0.66	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.66	U 0.66	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.0	U 6.0	18	1
10138	Phenanthrene	85-01-8	0.66	U 0.66	1.7	1
10138	Pyrene	129-00-0	0.82	J 0.66	1.7	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.2	U	1.2	3.6	1
10401	Dalapon	75-99-0	4.4	U	4.4	9.0	1
10401	2,4-DB	94-82-6	6.3	U	6.3	6.3	1
10401	Dicamba	1918-00-9	0.40	U	0.40	1.2	1
10401	Dinoseb	88-85-7	0.80	U	0.80	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.80	U	0.80	1.7	1
10401	MCPA	94-74-6	120	J	76	250	1
10401	MCPP (Mecoprop)	93-65-2	75	U	75	250	1
10401	2,4,5-T	93-76-5	0.26		0.082	0.17	1
10401	2,4,5-TP	93-72-1	0.075	U	0.075	0.17	1

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

Sample Description: SL-028-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419499
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL028 SDG#: DE253-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Aldrin	309-00-2	0.33 U	0.33	0.83	5
01363	Alpha BHC	319-84-6	0.17 U	0.17	0.83	5
01363	Beta BHC	319-85-7	0.30 U	0.30	0.83	5
01363	Gamma BHC - Lindane	58-89-9	0.17 U	0.17	0.83	5
01363	Chlordane	57-74-9	10 J	4.0	17	5
01363	p,p-DDD	72-54-8	0.46 U	0.46	1.7	5
01363	p,p-DDE	72-55-9	0.54 U	0.54	1.7	5
01363	p,p-DDT	50-29-3	7.0	0.33	1.7	5
01363	Delta BHC	319-86-8	0.18 U	0.18	0.83	5
01363	Dieldrin	60-57-1	2.1 U	2.1	2.1	5
01363	Endosulfan I	959-98-8	0.22 U	0.22	0.83	5
01363	Endosulfan II	33213-65-9	1.8 U	1.8	1.8	5
01363	Endosulfan Sulfate	1031-07-8	0.33 U	0.33	1.7	5
01363	Endrin	72-20-8	0.33 U	0.33	1.7	5
01363	Endrin Aldehyde	7421-93-4	0.87 U	0.87	1.7	5
01363	Endrin Ketone	53494-70-5	0.33 U	0.33	1.7	5
01363	Heptachlor	76-44-8	0.30 U	0.30	0.83	5
01363	Heptachlor Epoxide	1024-57-3	0.35 U	0.35	0.83	5
01363	Methoxychlor	72-43-5	1.7 U	1.7	8.3	5
01363	Mirex	2385-85-5	1.8 U	1.8	1.8	5
01363	Toxaphene	8001-35-2	60 U	60	60	5
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.3	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.3	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.3	1
10225	PCB-1016	12674-11-2	0.33 U	0.33	1.7	1
10225	PCB-1221	11104-28-2	0.33 U	0.33	1.7	1
10225	PCB-1232	11141-16-5	0.33 U	0.33	1.7	1
10225	PCB-1242	53469-21-9	0.33 U	0.33	1.7	1
10225	PCB-1248	12672-29-6	0.33 U	0.33	1.7	1
10225	PCB-1254	11097-69-1	1.9	0.33	1.7	1
10225	PCB-1260	11096-82-5	0.98 J	0.39	1.7	1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7	1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7	1
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	12,000	5.91	19.5	1
07914	Boron	7440-42-8	7.00	0.351	4.88	1
01650	Calcium	7440-70-2	4,810	2.44	19.5	1
01654	Iron	7439-89-6	25,400	2.55	19.5	1

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

Sample Description: SL-028-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419499
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL028 SDG#: DE253-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	21.4	0.61	2.0	1
01657	Magnesium	7439-95-4	6,320	0.430	9.76	1
06958	Manganese	7439-96-5	293	0.0351	0.488	1
10145	Phosphorus	7723-14-0	739	0.342	9.76	1
01662	Potassium	7440-09-7	4,800	11.0	48.8	1
01667	Sodium	7440-23-5	195	5.81	97.6	1
07968	Strontium	7440-24-6	21.1	0.0244	0.488	1
06969	Tin	7440-31-5	3.05 J	0.312	9.76	1
06970	Titanium	7440-32-6	1,480	0.0693	0.976	1
10146	Zirconium	7440-67-7	2.42 J	0.449	4.88	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.145 J	0.0722	0.195	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	2.80	0.0781	0.391	2
06126	Barium	7440-39-3	140	0.103	0.391	2
06127	Beryllium	7440-41-7	0.243	0.0156	0.0976	2
06128	Cadmium	7440-43-9	0.362	0.0430	0.0976	2
06131	Chromium	7440-47-3	22.5	0.117	0.391	2
06132	Cobalt	7440-48-4	7.43	0.0195	0.0976	2
06133	Copper	7440-50-8	16.5	0.0781	0.391	2
06135	Lead	7439-92-1	28.1	0.010	0.195	2
06138	Molybdenum	7439-98-7	0.384	0.0488	0.0976	2
06139	Nickel	7440-02-0	17.3	0.0976	0.391	2
06141	Selenium	7782-49-2	0.144 J	0.0566	0.391	2
06142	Silver	7440-22-4	0.351	0.0139	0.0976	2
06145	Thallium	7440-28-0	0.244	0.0293	0.0976	2
06148	Vanadium	7440-62-2	62.6	0.0215	0.0976	2
06149	Zinc	7440-66-6	109	0.547	2.93	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0095 J	0.0070	0.0996	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.79 U	0.79	0.99	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.1 U	9.1	30.2	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.38 J	0.20	1.0	1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.10	0.0100	0.0100	1

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

Sample Description: SL-028-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419499
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL028 SDG#: DE253-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11624	Moisture Content by 160.3	n.a.	0.56	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 14:36	Linda M Hartenstine	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/10/2011 23:36	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 03:48	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/12/2011 03:19	Melissa McDermott	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 15:50	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 17:43	John P Hook	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 08:21	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 17:43	John P Hook	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 17:43	John P Hook	1
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 17:43	John P Hook	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 17:43	John P Hook	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 08:21	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 08:21	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 17:43	John P Hook	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 17:43	John P Hook	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 08:21	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 08:21	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 08:21	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/10/2011 13:55	Eric L Eby	1

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

Sample Description: SL-028-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419499
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL028 SDG#: DE253-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 13:15	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:38	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 13:15	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 13:15	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 13:15	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:35	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 13:58	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201A	10/05/2011 18:14	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 20:37	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401A	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Sample Description: SL-029-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-029-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419500
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL029 SDG#: DE253-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	510	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400	1
04688	Benzoic acid	65-85-0	170	U 170	510	1
04688	Benzyl alcohol	100-51-6	170	U 170	510	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170	1
04688	4-Chloroaniline	106-47-8	69	U 69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170	1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	510	1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	510	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	34	U 34	170	1
04688	4-Methylphenol	106-44-5	34	U 34	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	34	U 34	170	1
04688	4-Nitroaniline	100-01-6	69	U 69	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	510	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	510	1
04688	Phenol	108-95-2	18	J 17	170	1

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

Sample Description: SL-029-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-029-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419500
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL029 SDG#: DE253-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170	1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
4,6-dinitro-2-methylphenol

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69	U 0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.34	U 0.34	1.7	1
10138	Anthracene	120-12-7	0.34	U 0.34	1.7	1
10138	Benzo(a)anthracene	56-55-3	1.3	J 0.69	1.7	1
10138	Benzo(a)pyrene	50-32-8	1.9	0.69	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	4.1	0.69	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	1.2	J 0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	1.2	J 0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.2	U 6.2	19	1
10138	Di-n-butylphthalate	84-74-2	6.2	U 6.2	19	1
10138	Chrysene	218-01-9	2.2	0.34	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U 0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.2	U 6.2	19	1
10138	Dimethylphthalate	131-11-3	6.2	U 6.2	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J 6.2	19	1
10138	Fluoranthene	206-44-0	2.9	0.69	1.7	1
10138	Fluorene	86-73-7	0.69	U 0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	J 0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69	U 0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69	U 0.69	1.7	1
10138	Naphthalene	91-20-3	0.69	U 0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U 0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	7.5	J 6.2	19	1
10138	Phenanthrene	85-01-8	2.3	0.69	1.7	1
10138	Pyrene	129-00-0	2.6	0.69	1.7	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.2	U	1.2	3.7	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.3	1
10401	2,4-DB	94-82-6	1.7	J	0.64	1.8	1
10401	Dicamba	1918-00-9	0.41	U	0.41	1.2	1
10401	Dinoseb	88-85-7	0.83	U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83	U	0.83	1.8	1
10401	MCPA	94-74-6	79	U	79	260	1
10401	MCPP (Mecoprop)	93-65-2	78	U	78	260	1
10401	2,4,5-T	93-76-5	0.085	U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1

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

Sample Description: SL-029-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-029-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419500
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL029 SDG#: DE253-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.068 U	0.068	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.062 U	0.062	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035 U	0.035	0.17	1
01363	Chlordane	57-74-9	3.3 J	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.30 U	0.30	0.35	1
01363	p,p-DDE	72-55-9	2.1 U	2.1	2.1	1
01363	p,p-DDT	50-29-3	3.5 U	3.5	3.5	5
01363	Delta BHC	319-86-8	0.35	0.037	0.17	1
01363	Dieldrin	60-57-1	1.2 U	1.2	1.2	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.36 U	0.36	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.068 U	0.068	0.35	1
01363	Endrin	72-20-8	0.45 U	0.45	0.45	1
01363	Endrin Aldehyde	7421-93-4	0.53 U	0.53	0.53	1
01363	Endrin Ketone	53494-70-5	0.068 U	0.068	0.35	1
01363	Heptachlor	76-44-8	0.062 U	0.062	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.53 U	0.53	0.53	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.17 U	0.17	0.35	1
01363	Toxaphene	8001-35-2	17 U	17	17	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.8	1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.8	1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.8	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8	1
10225	PCB-1254	11097-69-1	15	0.34	1.8	1
10225	PCB-1260	11096-82-5	5.0	0.40	1.8	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8	1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	29,200	6.20	20.5	1
07914	Boron	7440-42-8	13.5	0.369	5.12	1
01650	Calcium	7440-70-2	6,510	2.56	20.5	1
01654	Iron	7439-89-6	36,900	13.4	102	5
01656	Lithium	7439-93-2	55.1	0.64	2.0	1

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

Sample Description: SL-029-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-029-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419500
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL029 SDG#: DE253-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	10,200	0.451	10.2	1
06958	Manganese	7439-96-5	345	0.0369	0.512	1
10145	Phosphorus	7723-14-0	503	0.359	10.2	1
01662	Potassium	7440-09-7	5,730	11.6	51.2	1
01667	Sodium	7440-23-5	161	6.10	102	1
07968	Strontium	7440-24-6	28.8	0.0256	0.512	1
06969	Tin	7440-31-5	3.12 J	0.328	10.2	1
06970	Titanium	7440-32-6	1,700	0.0728	1.02	1
10146	Zirconium	7440-67-7	4.39 J	0.471	5.12	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.343	0.0744	0.201	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	8.36	0.0804	0.402	2
06126	Barium	7440-39-3	143	0.107	0.402	2
06127	Beryllium	7440-41-7	0.635	0.0161	0.101	2
06128	Cadmium	7440-43-9	0.252	0.0442	0.101	2
06131	Chromium	7440-47-3	58.8	0.121	0.402	2
06132	Cobalt	7440-48-4	14.0	0.0201	0.101	2
06133	Copper	7440-50-8	22.4	0.0804	0.402	2
06135	Lead	7439-92-1	15.7	0.0103	0.201	2
06138	Molybdenum	7439-98-7	0.514	0.0503	0.101	2
06139	Nickel	7440-02-0	29.2	0.101	0.402	2
06141	Selenium	7782-49-2	0.412	0.0583	0.402	2
06142	Silver	7440-22-4	0.0472 J	0.0143	0.101	2
06145	Thallium	7440-28-0	0.539	0.0302	0.101	2
06148	Vanadium	7440-62-2	118	0.0221	0.101	2
06149	Zinc	7440-66-6	116	0.563	3.02	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0076 J	0.0068	0.0964	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6	0.81	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.3 U	9.3	31.1	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.4	0.21	1.0	1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.90	0.0100	0.0100	1

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

Sample Description: SL-029-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-029-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419500
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:10

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14420 Albemarle Point Place
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SL029 SDG#: DE253-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11624	Moisture Content by 160.3	n.a.	3.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 15:01	Linda M Hartenstine	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/11/2011 00:08	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 04:15	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 22:18	Melissa McDermott	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 22:32	Melissa McDermott	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 16:09	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 17:50	John P Hook	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 08:25	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 17:50	John P Hook	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 17:54	John P Hook	5
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 17:50	John P Hook	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 17:50	John P Hook	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 08:25	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 08:25	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 17:50	John P Hook	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 17:50	John P Hook	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 08:25	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 08:25	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 08:25	Tara L Snyder	1

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

Sample Description: SL-029-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-029-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419500
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL029 SDG#: DE253-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010B	1	112715708001	10/10/2011 13:59	Eric L Eby	1
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 13:18	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:39	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 13:18	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 13:18	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 13:18	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:36	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 14:11	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201A	10/05/2011 18:37	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 20:44	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401A	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Sample Description: SL-030-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-030-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419501
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL030 SDG#: DE253-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	510	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400	1
04688	Benzoic acid	65-85-0	170	U 170	510	1
04688	Benzyl alcohol	100-51-6	170	U 170	510	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170	1
04688	4-Chloroaniline	106-47-8	68	U 68	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170	1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	510	1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	68	U 68	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	510	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	34	U 34	170	1
04688	4-Methylphenol	106-44-5	34	U 34	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	34	U 34	170	1
04688	4-Nitroaniline	100-01-6	68	U 68	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	510	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	510	1
04688	Phenol	108-95-2	17	U 17	170	1

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

Sample Description: SL-030-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-030-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419501
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL030 SDG#: DE253-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C						
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170	1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170	1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
4,6-dinitro-2-methylphenol						
GC/MS Semivolatiles SW-846 8270C SIM						
10138	Acenaphthene	83-32-9	0.67	U 0.67	1.7	1
10138	Acenaphthylene	208-96-8	2.9	0.34	1.7	1
10138	Anthracene	120-12-7	0.34	U 0.34	1.7	1
10138	Benzo(a)anthracene	56-55-3	10	0.67	1.7	1
10138	Benzo(a)pyrene	50-32-8	3.5	0.67	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	19	0.67	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.67	U 0.67	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.67	U 0.67	1.7	1
10138	Butylbenzylphthalate	85-68-7	200	6.1	18	1
10138	Di-n-butylphthalate	84-74-2	6.1	U 6.1	18	1
10138	Chrysene	218-01-9	4.4	0.34	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.67	U 0.67	1.7	1
10138	Diethylphthalate	84-66-2	6.1	U 6.1	18	1
10138	Dimethylphthalate	131-11-3	6.1	U 6.1	18	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J 6.1	18	1
10138	Fluoranthene	206-44-0	2.6	0.67	1.7	1
10138	Fluorene	86-73-7	3.5	0.67	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.94	J 0.67	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.67	U 0.67	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.67	U 0.67	1.7	1
10138	Naphthalene	91-20-3	0.99	J 0.67	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.67	U 0.67	1.7	1
10138	Di-n-octylphthalate	117-84-0	25	6.1	18	1
10138	Phenanthrene	85-01-8	1.4	J 0.67	1.7	1
10138	Pyrene	129-00-0	2.3	0.67	1.7	1
The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.						
Herbicides SW-846 8151A						
10401	2,4-D	94-75-7	1.2	U 1.2	3.7	1
10401	Dalapon	75-99-0	4.5	U 4.5	9.2	1
10401	2,4-DB	94-82-6	0.84	U 0.84	1.7	1
10401	Dicamba	1918-00-9	0.41	U 0.41	1.2	1
10401	Dinoseb	88-85-7	0.82	U 0.82	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.82	U 0.82	1.7	1
10401	MCPA	94-74-6	78	U 78	260	1
10401	MCPP (Mecoprop)	93-65-2	77	U 77	260	1
10401	2,4,5-T	93-76-5	0.084	U 0.084	0.17	1
10401	2,4,5-TP	93-72-1	0.077	U 0.077	0.17	1

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

Sample Description: SL-030-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-030-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419501
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL030 SDG#: DE253-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.067 U	0.067	0.17	1
01363	Alpha BHC	319-84-6	0.090 J	0.035	0.17	1
01363	Beta BHC	319-85-7	0.061 U	0.061	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.18	0.035	0.17	1
01363	Chlordane	57-74-9	3.4 J	0.82	3.5	1
01363	p,p-DDD	72-54-8	0.29 U	0.29	0.35	1
01363	p,p-DDE	72-55-9	0.86	0.090	0.35	1
01363	p,p-DDT	50-29-3	0.60 U	0.60	0.60	1
01363	Delta BHC	319-86-8	0.073 U	0.073	0.17	1
01363	Dieldrin	60-57-1	0.17 U	0.17	0.35	1
01363	Endosulfan I	959-98-8	0.089 J	0.045	0.17	1
01363	Endosulfan II	33213-65-9	0.40	0.067	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.067 U	0.067	0.35	1
01363	Endrin	72-20-8	0.25 U	0.25	0.35	1
01363	Endrin Aldehyde	7421-93-4	1.5 U	1.5	1.5	1
01363	Endrin Ketone	53494-70-5	0.067 U	0.067	0.35	1
01363	Heptachlor	76-44-8	0.15 U	0.15	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.13 U	0.13	0.17	1
01363	Methoxychlor	72-43-5	0.99 U	0.99	1.7	1
01363	Mirex	2385-85-5	0.067 U	0.067	0.35	1
01363	Toxaphene	8001-35-2	42 U	42	42	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.7	1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.7	1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.7	1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.7	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.7	1
10225	PCB-1254	11097-69-1	2.3	0.34	1.7	1
10225	PCB-1260	11096-82-5	1.3 J	0.40	1.7	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.7	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.7	1
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	26,100	6.12	20.2	1
07914	Boron	7440-42-8	17.3	0.364	5.06	1

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

Sample Description: SL-030-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-030-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419501
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL030 SDG#: DE253-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	8,470	2.53	20.2	1
01654	Iron	7439-89-6	34,100	13.2	101	5
01656	Lithium	7439-93-2	47.1	0.63	2.0	1
01657	Magnesium	7439-95-4	9,090	0.445	10.1	1
06958	Manganese	7439-96-5	377	0.0364	0.506	1
10145	Phosphorus	7723-14-0	677	0.354	10.1	1
01662	Potassium	7440-09-7	7,340	11.4	50.6	1
01667	Sodium	7440-23-5	146	6.02	101	1
07968	Strontium	7440-24-6	35.9	0.0253	0.506	1
06969	Tin	7440-31-5	3.08 J	0.324	10.1	1
06970	Titanium	7440-32-6	1,670	0.0719	1.01	1
10146	Zirconium	7440-67-7	3.54 J	0.466	5.06	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.182 J	0.0749	0.202	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	9.83	0.0810	0.405	2
06126	Barium	7440-39-3	180	0.107	0.405	2
06127	Beryllium	7440-41-7	0.576	0.0162	0.101	2
06128	Cadmium	7440-43-9	0.283	0.0445	0.101	2
06131	Chromium	7440-47-3	68.5	0.121	0.405	2
06132	Cobalt	7440-48-4	16.8	0.0202	0.101	2
06133	Copper	7440-50-8	25.6	0.0810	0.405	2
06135	Lead	7439-92-1	17.8	0.0103	0.202	2
06138	Molybdenum	7439-98-7	0.651	0.0506	0.101	2
06139	Nickel	7440-02-0	34.2	0.101	0.405	2
06141	Selenium	7782-49-2	0.483	0.0587	0.405	2
06142	Silver	7440-22-4	0.0488 J	0.0144	0.101	2
06145	Thallium	7440-28-0	0.616	0.0304	0.101	2
06148	Vanadium	7440-62-2	136	0.0223	0.101	2
06149	Zinc	7440-66-6	138	0.567	3.04	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0145 J	0.0070	0.100	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2	0.83	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.2 U	9.2	30.7	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0	1

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

Sample Description: SL-030-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-030-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419501
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL030 SDG#: DE253-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry			SW-846 9045C modified	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.08	0.0100	0.0100	1
Wet Chemistry			EPA 160.3 modified	%	%	
11624	Moisture Content by 160.3	n.a.	2.2	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 15:26	Linda M Hartenstine	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/10/2011 11:10	Brian K Graham	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 04:43	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 17:09	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 16:28	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 17:58	John P Hook	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 08:29	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 17:58	John P Hook	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 18:02	John P Hook	5
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 17:58	John P Hook	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 17:58	John P Hook	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 08:29	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 08:29	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 17:58	John P Hook	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 17:58	John P Hook	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 08:29	Tara L Snyder	1

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

Sample Description: SL-030-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-030-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419501
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:25

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL030 SDG#: DE253-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 08:29	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 08:29	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/10/2011 14:03	Eric L Eby	1
06124	Antimony	SW-846 6020	1	112711026001A	10/04/2011 05:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 13:21	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:41	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 13:21	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 13:21	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 13:21	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:37	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 14:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201A	10/05/2011 19:01	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 20:59	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201A	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401B	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Sample Description: SL-031-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-031-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419502
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL031 SDG#: DE253-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170	1
04688	4-Chloroaniline	106-47-8	69	U 69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170	1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	J 17	340	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	34	U 34	170	1
04688	4-Methylphenol	106-44-5	34	U 34	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	34	U 34	170	1
04688	4-Nitroaniline	100-01-6	69	U 69	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1

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

Sample Description: SL-031-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-031-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419502
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL031 SDG#: DE253-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	20	J 17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170	1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
4,6-dinitro-2-methylphenol

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69	U 0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.34	U 0.34	1.7	1
10138	Anthracene	120-12-7	0.34	U 0.34	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.69	U 0.69	1.7	1
10138	Benzo(a)pyrene	50-32-8	0.69	U 0.69	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	0.69	U 0.69	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.69	U 0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.69	U 0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.2	U 6.2	19	1
10138	Di-n-butylphthalate	84-74-2	6.2	U 6.2	19	1
10138	Chrysene	218-01-9	0.34	U 0.34	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U 0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.2	U 6.2	19	1
10138	Dimethylphthalate	131-11-3	6.2	U 6.2	19	1
10138	Fluoranthene	206-44-0	0.69	U 0.69	1.7	1
10138	Fluorene	86-73-7	0.69	U 0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.69	U 0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69	U 0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69	U 0.69	1.7	1
10138	Naphthalene	91-20-3	0.69	U 0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U 0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.2	U 6.2	19	1
10138	Phenanthrene	85-01-8	0.69	U 0.69	1.7	1
10138	Pyrene	129-00-0	0.69	U 0.69	1.7	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.2	U	1.2	3.7	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.3	1
10401	2,4-DB	94-82-6	3.2		0.64	1.8	1
10401	Dicamba	1918-00-9	0.41	U	0.41	1.2	1
10401	Dinoseb	88-85-7	0.83	U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83	U	0.83	1.8	1
10401	MCPA	94-74-6	170	U	170	260	1
10401	MCPP (Mecoprop)	93-65-2	78	U	78	260	1
10401	2,4,5-T	93-76-5	0.085	U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1

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

Sample Description: SL-031-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-031-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419502
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL031 SDG#: DE253-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.068 U	0.068	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.062 U	0.062	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035 U	0.035	0.17	1
01363	Chlordane	57-74-9	6.2	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.42 U	0.42	0.42	1
01363	p,p-DDE	72-55-9	2.2	0.068	0.35	1
01363	p,p-DDT	50-29-3	2.9	0.068	0.35	1
01363	Delta BHC	319-86-8	0.037 U	0.037	0.17	1
01363	Dieldrin	60-57-1	0.16 U	0.16	0.35	1
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.17	1
01363	Endosulfan II	33213-65-9	0.068 U	0.068	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.068 U	0.068	0.35	1
01363	Endrin	72-20-8	0.068 U	0.068	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.73	0.068	0.35	1
01363	Endrin Ketone	53494-70-5	0.068 U	0.068	0.35	1
01363	Heptachlor	76-44-8	0.062 U	0.062	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.17 U	0.17	0.17	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.19 U	0.19	0.35	1
01363	Toxaphene	8001-35-2	10	2.3	6.8	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.8	1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.8	1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.8	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8	1
10225	PCB-1254	11097-69-1	2.4	0.34	1.8	1
10225	PCB-1260	11096-82-5	0.40 U	0.40	1.8	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8	1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	29,200	6.26	20.7	1
07914	Boron	7440-42-8	14.0	0.373	5.18	1
01650	Calcium	7440-70-2	6,570	2.59	20.7	1
01654	Iron	7439-89-6	39,000	13.5	104	5

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

Sample Description: SL-031-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-031-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419502
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL031 SDG#: DE253-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	45.2	0.64	2.1	1
01657	Magnesium	7439-95-4	9,660	0.455	10.4	1
06958	Manganese	7439-96-5	361	0.0373	0.518	1
10145	Phosphorus	7723-14-0	528	0.362	10.4	1
01662	Potassium	7440-09-7	6,660	11.7	51.8	1
01667	Sodium	7440-23-5	135	6.16	104	1
07968	Strontium	7440-24-6	34.5	0.0259	0.518	1
06969	Tin	7440-31-5	3.21 J	0.331	10.4	1
06970	Titanium	7440-32-6	1,710	0.0735	1.04	1
10146	Zirconium	7440-67-7	5.13 J	0.476	5.18	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.341	0.0751	0.203	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	8.83	0.0812	0.406	2
06126	Barium	7440-39-3	151	0.108	0.406	2
06127	Beryllium	7440-41-7	0.693	0.0162	0.101	2
06128	Cadmium	7440-43-9	0.268	0.0447	0.101	2
06131	Chromium	7440-47-3	55.5	0.122	0.406	2
06132	Cobalt	7440-48-4	14.0	0.0203	0.101	2
06133	Copper	7440-50-8	24.8	0.0812	0.406	2
06135	Lead	7439-92-1	32.3	0.0104	0.203	2
06138	Molybdenum	7439-98-7	0.664	0.0507	0.101	2
06139	Nickel	7440-02-0	28.6	0.101	0.406	2
06141	Selenium	7782-49-2	0.510	0.0589	0.406	2
06142	Silver	7440-22-4	0.0554 J	0.0144	0.101	2
06145	Thallium	7440-28-0	0.526	0.0304	0.101	2
06148	Vanadium	7440-62-2	111	0.0223	0.101	2
06149	Zinc	7440-66-6	138	0.568	3.04	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0130 J	0.0070	0.100	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	0.82	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.3 U	9.3	31.1	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.38 J	0.21	1.0	1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.96	0.0100	0.0100	1

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

Sample Description: SL-031-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-031-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419502
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL031 SDG#: DE253-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11624	Moisture Content by 160.3	n.a.	3.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 15:51	Linda M Hartenstine	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/11/2011 01:12	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 05:10	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 17:23	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 16:46	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 18:16	John P Hook	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 08:33	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 18:16	John P Hook	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 18:05	John P Hook	5
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 18:16	John P Hook	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 18:16	John P Hook	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 08:33	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 08:33	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 18:16	John P Hook	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 18:16	John P Hook	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 08:33	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 08:33	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 08:33	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/10/2011 14:07	Eric L Eby	1

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

Sample Description: SL-031-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-031-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419502
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:50

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL031 SDG#: DE253-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 13:24	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:42	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 13:24	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 13:24	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 13:24	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:38	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201A	10/05/2011 14:36	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201B	10/05/2011 20:56	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 21:13	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201A	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201B	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401B	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Sample Description: SL-032-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-032-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419503
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL032 SDG#: DE253-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	510	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400	1
04688	Benzoic acid	65-85-0	170	U 170	510	1
04688	Benzyl alcohol	100-51-6	170	U 170	510	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170	1
04688	4-Chloroaniline	106-47-8	68	U 68	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170	1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	510	1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	68	U 68	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	510	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	34	U 34	170	1
04688	4-Methylphenol	106-44-5	34	U 34	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	34	U 34	170	1
04688	4-Nitroaniline	100-01-6	68	U 68	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	510	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	510	1
04688	Phenol	108-95-2	18	J 17	170	1

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

Sample Description: SL-032-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-032-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419503
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL032 SDG#: DE253-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C						
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170	1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170	1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
4,6-dinitro-2-methylphenol						
GC/MS Semivolatiles SW-846 8270C SIM						
10138	Acenaphthene	83-32-9	0.67	U 0.67	1.7	1
10138	Acenaphthylene	208-96-8	0.34	U 0.34	1.7	1
10138	Anthracene	120-12-7	0.57	J 0.34	1.7	1
10138	Benzo(a)anthracene	56-55-3	6.7	0.67	1.7	1
10138	Benzo(a)pyrene	50-32-8	6.8	0.67	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	20	0.67	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	1.3	J 0.67	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.67	U 0.67	1.7	1
10138	Butylbenzylphthalate	85-68-7	18	6.1	18	1
10138	Di-n-butylphthalate	84-74-2	6.1	U 6.1	18	1
10138	Chrysene	218-01-9	8.5	0.34	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.67	U 0.67	1.7	1
10138	Diethylphthalate	84-66-2	6.1	U 6.1	18	1
10138	Dimethylphthalate	131-11-3	6.1	U 6.1	18	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	66	6.1	18	1
10138	Fluoranthene	206-44-0	12	0.67	1.7	1
10138	Fluorene	86-73-7	0.67	U 0.67	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.4	J 0.67	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.84	J 0.67	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.81	J 0.67	1.7	1
10138	Naphthalene	91-20-3	1.5	J 0.67	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.67	U 0.67	1.7	1
10138	Di-n-octylphthalate	117-84-0	9.6	J 6.1	18	1
10138	Phenanthrene	85-01-8	2.8	0.67	1.7	1
10138	Pyrene	129-00-0	12	0.67	1.7	1
The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.						
Herbicides SW-846 8151A						
10401	2,4-D	94-75-7	1.2	U 1.2	3.7	1
10401	Dalapon	75-99-0	4.5	U 4.5	9.2	1
10401	2,4-DB	94-82-6	1.7	J 0.63	1.7	1
10401	Dicamba	1918-00-9	0.41	U 0.41	1.2	1
10401	Dinoseb	88-85-7	0.82	U 0.82	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.82	U 0.82	1.7	1
10401	MCPA	94-74-6	92	U 92	260	1
10401	MCPP (Mecoprop)	93-65-2	77	U 77	260	1
10401	2,4,5-T	93-76-5	0.15	J 0.084	0.17	1
10401	2,4,5-TP	93-72-1	0.077	U 0.077	0.17	1

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

Sample Description: SL-032-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-032-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419503
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL032 SDG#: DE253-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Aldrin	309-00-2	0.067 U	0.067	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.061 U	0.061	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.057 J	0.035	0.17	1
01363	Chlordane	57-74-9	2.6 J	0.82	3.5	1
01363	p,p-DDD	72-54-8	0.30 U	0.30	0.35	1
01363	p,p-DDE	72-55-9	1.2	0.067	0.35	1
01363	p,p-DDT	50-29-3	0.94 U	0.94	0.94	1
01363	Delta BHC	319-86-8	0.037 U	0.037	0.17	1
01363	Dieldrin	60-57-1	0.20 U	0.20	0.35	1
01363	Endosulfan I	959-98-8	0.045 U	0.045	0.17	1
01363	Endosulfan II	33213-65-9	0.067 U	0.067	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.067 U	0.067	0.35	1
01363	Endrin	72-20-8	0.067 U	0.067	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.46	0.067	0.35	1
01363	Endrin Ketone	53494-70-5	0.34 U	0.34	0.35	1
01363	Heptachlor	76-44-8	0.061 U	0.061	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.10 U	0.10	0.17	1
01363	Methoxychlor	72-43-5	0.81 J	0.35	1.7	1
01363	Mirex	2385-85-5	0.15 U	0.15	0.35	1
01363	Toxaphene	8001-35-2	10 U	10	10	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.7	1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.7	1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.7	1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.7	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.7	1
10225	PCB-1254	11097-69-1	7.9	0.34	1.7	1
10225	PCB-1260	11096-82-5	0.40 U	0.40	1.7	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.7	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.7	1
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	26,500	6.19	20.4	1
07914	Boron	7440-42-8	15.9	0.368	5.11	1

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

Sample Description: SL-032-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-032-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419503
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL032 SDG#: DE253-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	15,900	2.56	20.4	1
01654	Iron	7439-89-6	33,500	13.3	102	5
01656	Lithium	7439-93-2	40.6	0.63	2.0	1
01657	Magnesium	7439-95-4	8,580	0.450	10.2	1
06958	Manganese	7439-96-5	371	0.0368	0.511	1
10145	Phosphorus	7723-14-0	571	0.358	10.2	1
01662	Potassium	7440-09-7	6,450	11.6	51.1	1
01667	Sodium	7440-23-5	136	6.08	102	1
07968	Strontium	7440-24-6	51.6	0.0256	0.511	1
06969	Tin	7440-31-5	3.07 J	0.327	10.2	1
06970	Titanium	7440-32-6	1,520	0.0726	1.02	1
10146	Zirconium	7440-67-7	2.88 J	0.470	5.11	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.317	0.0749	0.202	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	8.40	0.0810	0.405	2
06126	Barium	7440-39-3	146	0.107	0.405	2
06127	Beryllium	7440-41-7	0.621	0.0162	0.101	2
06128	Cadmium	7440-43-9	0.282	0.0445	0.101	2
06131	Chromium	7440-47-3	47.7	0.121	0.405	2
06132	Cobalt	7440-48-4	12.6	0.0202	0.101	2
06133	Copper	7440-50-8	20.1	0.0810	0.405	2
06135	Lead	7439-92-1	15.3	0.0103	0.202	2
06138	Molybdenum	7439-98-7	0.794	0.0506	0.101	2
06139	Nickel	7440-02-0	26.2	0.101	0.405	2
06141	Selenium	7782-49-2	0.515	0.0587	0.405	2
06142	Silver	7440-22-4	0.0435 J	0.0144	0.101	2
06145	Thallium	7440-28-0	0.474	0.0304	0.101	2
06148	Vanadium	7440-62-2	97.5	0.0223	0.101	2
06149	Zinc	7440-66-6	101	0.567	3.04	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0071 U	0.0071	0.101	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2	0.83	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.2 U	9.2	30.7	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.37 J	0.20	1.0	1

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

Sample Description: SL-032-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-032-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419503
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL032 SDG#: DE253-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry			SW-846 9045C modified	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.30	0.0100	0.0100	1
Wet Chemistry			EPA 160.3 modified	%	%	
11624	Moisture Content by 160.3	n.a.	2.2	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 16:16	Linda M Hartenstine	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/10/2011 12:15	Brian K Graham	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 05:38	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 16:54	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 17:05	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 18:21	John P Hook	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 08:37	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 18:21	John P Hook	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 18:25	John P Hook	5
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 18:21	John P Hook	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 18:21	John P Hook	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 08:37	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 08:37	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 18:21	John P Hook	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 18:21	John P Hook	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 08:37	Tara L Snyder	1

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

Sample Description: SL-032-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-032-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419503
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

SL032 SDG#: DE253-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 08:37	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 08:37	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/10/2011 14:11	Eric L Eby	1
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 13:27	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:47	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 13:27	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 13:27	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 13:27	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:39	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201B	10/05/2011 14:49	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201B	10/05/2011 21:19	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 21:35	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201B	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201B	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401B	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Sample Description: DUP01-SA5DS-QC-092611 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA5DS-QC-092611

LLI Sample # SW 6419504
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

DUP01 SDG#: DE253-12FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	500	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,300	1
04688	Benzoic acid	65-85-0	170	U 170	500	1
04688	Benzyl alcohol	100-51-6	170	U 170	500	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	33	U 33	170	1
04688	4-Chloroaniline	106-47-8	67	U 67	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	33	U 33	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	330	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	33	U 33	170	1
04688	3,5-Dimethylphenol	108-68-9	33	U 33	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	500	1
04688	2,4-Dinitrophenol	51-28-5	330	U 330	1,000	1
04688	2,4-Dinitrotoluene	121-14-2	33	U 33	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	51	J 17	330	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	67	U 67	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	500	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	33	U 33	170	1
04688	4-Methylphenol	106-44-5	33	U 33	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	33	U 33	170	1
04688	4-Nitroaniline	100-01-6	67	U 67	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	500	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	500	1

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

Sample Description: DUP01-SA5DS-QC-092611 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA5DS-QC-092611

LLI Sample # SW 6419504
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

DUP01 SDG#: DE253-12FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18	J 17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	33	U 33	170	1
04688	2,4,6-Trichlorophenol	88-06-2	33	U 33	170	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
4,6-dinitro-2-methylphenol

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.67	U 0.67	1.7	1
10138	Acenaphthylene	208-96-8	0.33	U 0.33	1.7	1
10138	Anthracene	120-12-7	0.33	U 0.33	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.67	U 0.67	1.7	1
10138	Benzo(a)pyrene	50-32-8	0.67	U 0.67	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	1.1	J 0.67	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.67	U 0.67	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.67	U 0.67	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.0	U 6.0	18	1
10138	Di-n-butylphthalate	84-74-2	6.0	U 6.0	18	1
10138	Chrysene	218-01-9	0.75	J 0.33	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.67	U 0.67	1.7	1
10138	Diethylphthalate	84-66-2	6.0	U 6.0	18	1
10138	Dimethylphthalate	131-11-3	6.0	U 6.0	18	1
10138	Fluoranthene	206-44-0	0.67	U 0.67	1.7	1
10138	Fluorene	86-73-7	0.67	U 0.67	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.67	U 0.67	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.67	U 0.67	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.67	U 0.67	1.7	1
10138	Naphthalene	91-20-3	0.67	U 0.67	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.67	U 0.67	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.0	U 6.0	18	1
10138	Phenanthrene	85-01-8	0.67	U 0.67	1.7	1
10138	Pyrene	129-00-0	0.67	U 0.67	1.7	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.2	U	1.2	3.6	1
10401	Dalapon	75-99-0	4.4	U	4.4	9.0	1
10401	2,4-DB	94-82-6	0.62	U	0.62	1.7	1
10401	Dicamba	1918-00-9	0.40	U	0.40	1.2	1
10401	Dinoseb	88-85-7	0.80	U	0.80	2.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.80	U	0.80	1.7	1
10401	MCPA	94-74-6	110	U	110	250	1
10401	MCPP (Mecoprop)	93-65-2	75	U	75	250	1
10401	2,4,5-T	93-76-5	0.43	U	0.43	0.43	1
10401	2,4,5-TP	93-72-1	0.075	U	0.075	0.17	1

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

Sample Description: DUP01-SA5DS-QC-092611 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA5DS-QC-092611

LLI Sample # SW 6419504
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

DUP01 SDG#: DE253-12FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.066 U	0.066	0.17	1
01363	Alpha BHC	319-84-6	0.034 U	0.034	0.17	1
01363	Beta BHC	319-85-7	0.060 U	0.060	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.049 U	0.049	0.17	1
01363	Chlordane	57-74-9	5.3	0.81	3.4	1
01363	p,p-DDD	72-54-8	0.066 U	0.066	0.34	1
01363	p,p-DDE	72-55-9	0.70	0.066	0.34	1
01363	p,p-DDT	50-29-3	1.5	0.066	0.34	1
01363	Delta BHC	319-86-8	0.48	0.036	0.17	1
01363	Dieldrin	60-57-1	0.17 U	0.17	0.34	1
01363	Endosulfan I	959-98-8	0.044 U	0.044	0.17	1
01363	Endosulfan II	33213-65-9	0.28 U	0.28	0.34	1
01363	Endosulfan Sulfate	1031-07-8	0.072 U	0.072	0.34	1
01363	Endrin	72-20-8	0.12 U	0.12	0.34	1
01363	Endrin Aldehyde	7421-93-4	0.51	0.066	0.34	1
01363	Endrin Ketone	53494-70-5	0.34 U	0.34	0.34	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.13 U	0.13	0.17	1
01363	Methoxychlor	72-43-5	0.34 U	0.34	1.7	1
01363	Mirex	2385-85-5	0.19 U	0.19	0.34	1
01363	Toxaphene	8001-35-2	13 U	13	13	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.3	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.3	1
10225	Aroclor 5460	11126-42-4	7.4	1.0	3.3	1
10225	PCB-1016	12674-11-2	0.33 U	0.33	1.7	1
10225	PCB-1221	11104-28-2	0.33 U	0.33	1.7	1
10225	PCB-1232	11141-16-5	0.33 U	0.33	1.7	1
10225	PCB-1242	53469-21-9	0.33 U	0.33	1.7	1
10225	PCB-1248	12672-29-6	0.33 U	0.33	1.7	1
10225	PCB-1254	11097-69-1	4.9	0.33	1.7	1
10225	PCB-1260	11096-82-5	5.9	0.39	1.7	1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7	1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7	1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,200	5.97	19.8	1
07914	Boron	7440-42-8	6.86	0.356	4.94	1
01650	Calcium	7440-70-2	5,090	2.47	19.8	1
01654	Iron	7439-89-6	23,700	2.58	19.8	1

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

Sample Description: DUP01-SA5DS-QC-092611 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA5DS-QC-092611

LLI Sample # SW 6419504
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

DUP01 SDG#: DE253-12FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	18.2	0.61	2.0	1
01657	Magnesium	7439-95-4	5,790	0.435	9.88	1
06958	Manganese	7439-96-5	308	0.0356	0.494	1
10145	Phosphorus	7723-14-0	879	0.346	9.88	1
01662	Potassium	7440-09-7	1,630	11.2	49.4	1
01667	Sodium	7440-23-5	109	5.88	98.8	1
07968	Strontium	7440-24-6	22.4	0.0247	0.494	1
06969	Tin	7440-31-5	2.90 J	0.316	9.88	1
06970	Titanium	7440-32-6	1,160	0.0701	0.988	1
10146	Zirconium	7440-67-7	8.12	0.454	4.94	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.430	0.0745	0.201	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	8.99	0.0806	0.403	2
06126	Barium	7440-39-3	98.1	0.107	0.403	2
06127	Beryllium	7440-41-7	0.397	0.0161	0.101	2
06128	Cadmium	7440-43-9	0.351	0.0443	0.101	2
06131	Chromium	7440-47-3	63.1	0.121	0.403	2
06132	Cobalt	7440-48-4	11.7	0.0201	0.101	2
06133	Copper	7440-50-8	8.84	0.0806	0.403	2
06135	Lead	7439-92-1	48.0	0.0103	0.201	2
06138	Molybdenum	7439-98-7	0.906	0.0504	0.101	2
06139	Nickel	7440-02-0	19.4	0.101	0.403	2
06141	Selenium	7782-49-2	0.275 J	0.0584	0.403	2
06142	Silver	7440-22-4	0.0541 J	0.0143	0.101	2
06145	Thallium	7440-28-0	0.197	0.0302	0.101	2
06148	Vanadium	7440-62-2	118	0.0222	0.101	2
06149	Zinc	7440-66-6	82.3	0.564	3.02	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0115 J	0.0066	0.0943	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9	0.82	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.1 U	9.1	30.2	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0	1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.51	0.0100	0.0100	1

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

Sample Description: DUP01-SA5DS-QC-092611 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA5DS-QC-092611

LLI Sample # SW 6419504
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

DUP01 SDG#: DE253-12FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11624	Moisture Content by 160.3	n.a.	0.73	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11277SLC026	10/06/2011 16:40	Linda M Hartenstine	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11274SLG026	10/11/2011 02:16	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11274SLG026	10/04/2011 07:30	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11277SLC026	10/05/2011 07:35	Katheryne V Sponheimer	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	112770013A	10/06/2011 06:05	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	112780013A	10/10/2011 21:49	Melissa McDermott	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112740010A	10/04/2011 18:39	Jessica L Miller	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	112780013A	10/05/2011 18:00	Sally L Appleyard	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112740010A	10/03/2011 16:15	JoElla L Rice	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	112770013A	10/05/2011 02:00	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	1	112715708001	10/07/2011 18:28	John P Hook	1
07914	Boron	SW-846 6010B	1	112715708001	10/07/2011 08:41	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112715708001	10/07/2011 18:28	John P Hook	1
01654	Iron	SW-846 6010B	1	112715708001	10/07/2011 18:28	John P Hook	1
01656	Lithium	SW-846 6010B	1	112715708001	10/07/2011 18:28	John P Hook	1
01657	Magnesium	SW-846 6010B	1	112715708001	10/07/2011 18:28	John P Hook	1
06958	Manganese	SW-846 6010B	1	112715708001	10/07/2011 08:41	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112715708001	10/07/2011 08:41	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112715708001	10/07/2011 18:28	John P Hook	1
01667	Sodium	SW-846 6010B	1	112715708001	10/07/2011 18:28	John P Hook	1
07968	Strontium	SW-846 6010B	1	112715708001	10/07/2011 08:41	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112715708001	10/07/2011 08:41	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112715708001	10/07/2011 08:41	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112715708001	10/10/2011 14:16	Eric L Eby	1

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

Sample Description: DUP01-SA5DS-QC-092611 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA5DS-QC-092611

LLI Sample # SW 6419504
LLI Group # 1268378
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:10

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

Submitted: 09/27/2011 09:00

Reported: 10/20/2011 12:55

DUP01 SDG#: DE253-12FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06124	Antimony	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112711026001D	09/29/2011 13:30	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112711026001A	09/29/2011 17:48	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112711026001C	09/29/2011 13:30	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112711026001B	09/29/2011 13:30	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112711026001A	09/29/2011 13:30	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112715711003	09/29/2011 09:40	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112715708001	09/28/2011 22:05	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112711026001	09/28/2011 22:07	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112715711003	09/29/2011 01:10	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11276621201B	10/05/2011 15:27	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11277621201B	10/05/2011 21:42	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11278243201A	10/06/2011 21:42	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11276621201B	10/03/2011 07:40	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11277621201B	10/04/2011 08:00	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11283039401B	10/10/2011 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11278243201A	10/05/2011 13:05	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11274SLG026 Sample number(s): 6419488-6419493, 6419497-6419504									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	97		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	89		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	94		73-113		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	96		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	98		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	106		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	101		66-150		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	102		54-142		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	103		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	106		75-137		
Chrysene	0.33 U	0.33	1.7	ug/kg	97		73-114		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	103		53-138		
Diethylphthalate	6.0 U	6.0	18	ug/kg	97		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	98		79-121		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	105		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	100		64-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	97		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	101		56-134		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	85		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	85		62-120		
Naphthalene	0.67 U	0.67	1.7	ug/kg	86		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	79		55-118		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	109		68-162		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	90		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	93		72-119		
Batch number: 11277SLC026 Sample number(s): 6419488-6419493, 6419497-6419504									
Acenaphthene	17 U	17.	170	ug/kg	99		76-111		
Acenaphthylene	17 U	17.	170	ug/kg	105		75-122		
Aniline	170 U	170.	500	ug/kg	62		20-115		
Anthracene	17 U	17.	170	ug/kg	106		76-112		
Benzidine	1,200 U	1,200.	3,300	ug/kg	45		15-121		
Benzo(a)anthracene	17 U	17.	170	ug/kg	107		73-112		
Benzo(a)pyrene	17 U	17.	170	ug/kg	107		65-124		
Benzo(b)fluoranthene	17 U	17.	170	ug/kg	115		61-127		
Benzo(g,h,i)perylene	17 U	17.	170	ug/kg	116		60-125		
Benzo(k)fluoranthene	17 U	17.	170	ug/kg	99		67-125		
Benzoic acid	170 U	170.	500	ug/kg	68		62-113		
Benzyl alcohol	170 U	170.	500	ug/kg	88		68-111		
4-Bromophenyl-phenylether	17 U	17.	170	ug/kg	96		73-114		
Butylbenzylphthalate	17 U	17.	170	ug/kg	109		75-115		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Di-n-butylphthalate	17 U	17.	170	ug/kg	104		79-112		
Carbazole	17 U	17.	170	ug/kg	106		77-113		
4-Chloro-3-methylphenol	33 U	33.	170	ug/kg	99		74-119		
4-Chloroaniline	67 U	67.	170	ug/kg	57		10-110		
bis(2-Chloroethoxy)methane	17 U	17.	170	ug/kg	92		70-118		
bis(2-Chloroethyl)ether	17 U	17.	170	ug/kg	87		70-104		
bis(2-Chloroisopropyl)ether	17 U	17.	170	ug/kg	79		62-115		
2-Chloronaphthalene	17 U	17.	170	ug/kg	95		49-128		
2-Chlorophenol	17 U	17.	170	ug/kg	91		72-112		
4-Chlorophenyl-phenylether	33 U	33.	170	ug/kg	89		74-115		
Chrysene	17 U	17.	170	ug/kg	105		76-113		
Dibenz(a,h)anthracene	17 U	17.	170	ug/kg	116		61-126		
Dibenzofuran	17 U	17.	170	ug/kg	95		74-116		
1,2-Dichlorobenzene	17 U	17.	170	ug/kg	81		74-99		
1,3-Dichlorobenzene	17 U	17.	170	ug/kg	81		70-98		
1,4-Dichlorobenzene	17 U	17.	170	ug/kg	76		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	62		10-116		
2,4-Dichlorophenol	17 U	17.	170	ug/kg	95		75-111		
Diethylphthalate	17 U	17.	170	ug/kg	99		76-111		
2,4-Dimethylphenol	33 U	33.	170	ug/kg	97		72-111		
3,5-Dimethylphenol	33 U	33.	170	ug/kg	100		83-120		
Dimethylphthalate	17 U	17.	170	ug/kg	96		77-109		
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	43*		46-120		
2,4-Dinitrophenol	330 U	330.	1,000	ug/kg	19		18-133		
2,4-Dinitrotoluene	33 U	33.	170	ug/kg	99		73-115		
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	106		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	103		71-125		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	107		75-117		
Fluoranthene	17 U	17.	170	ug/kg	109		78-116		
Fluorene	17 U	17.	170	ug/kg	99		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	92		73-119		
Hexachlorobutadiene	67 U	67.	170	ug/kg	81		65-117		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	78		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	80		61-109		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	117		64-119		
Isophorone	17 U	17.	170	ug/kg	94		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	88		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	94		69-109		
2-Methylphenol	33 U	33.	170	ug/kg	90		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	86		66-117		
Naphthalene	17 U	17.	170	ug/kg	91		73-106		
2-Nitroaniline	17 U	17.	170	ug/kg	94		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	90		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	73		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	96		66-119		
2-Nitrophenol	17 U	17.	170	ug/kg	98		76-111		
4-Nitrophenol	170 U	170.	500	ug/kg	90		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	80		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	81		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	104		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	100		62-137		
Pentachlorophenol	170 U	170.	500	ug/kg	80		51-117		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Phenanthrene	17 U	17.	170	ug/kg	102		77-113		
Phenol	17 U	17.	170	ug/kg	86		58-112		
Pyrene	17 U	17.	170	ug/kg	102		75-115		
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	86		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	99		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	101		78-111		
Batch number: 112770013A Sample number(s): 6419488-6419493, 6419495-6419504									
2,4-D	1.2 U	1.2	3.6	ug/kg	109		73-146		
Dalapon	4.4 U	4.4	9.0	ug/kg	71		11-116		
2,4-DB	0.62 U	0.62	1.7	ug/kg	95		62-131		
Dicamba	0.40 U	0.40	1.2	ug/kg	88		54-121		
Dinoseb	0.80 U	0.80	2.4	ug/kg	9*		10-36		
2,4-DP (Dichlorprop)	0.80 U	0.80	1.7	ug/kg	113		62-170		
MCPA	76 U	76.	250	ug/kg	80		60-130		
MCPP (Mecoprop)	75 U	75.	250	ug/kg	72		54-137		
2,4,5-T	0.082 U	0.082	0.17	ug/kg	101		73-143		
2,4,5-TP	0.075 U	0.075	0.17	ug/kg	88		68-114		
Batch number: 112740010A Sample number(s): 6419488-6419493, 6419495-6419504									
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	69	73	36-106	5	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	84		72-120		
PCB-1221	0.33 U	0.33	1.7	ug/kg					
PCB-1232	0.33 U	0.33	1.7	ug/kg					
PCB-1242	0.33 U	0.33	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.39 U	0.39	1.7	ug/kg	95		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 112780013A Sample number(s): 6419488-6419493, 6419495-6419504									
Aldrin	0.066 U	0.066	0.17	ug/kg	88		44-135		
Alpha BHC	0.034 U	0.034	0.17	ug/kg	79		38-130		
Beta BHC	0.060 U	0.060	0.17	ug/kg	106		56-134		
Gamma BHC - Lindane	0.034 U	0.034	0.17	ug/kg	91		46-127		
Chlordane	0.80 U	0.80	3.4	ug/kg					
p,p-DDD	0.066 U	0.066	0.34	ug/kg	136		60-137		
p,p-DDE	0.066 U	0.066	0.34	ug/kg	135		59-141		
p,p-DDT	0.066 U	0.066	0.34	ug/kg	120		54-130		
Delta BHC	0.036 U	0.036	0.17	ug/kg	113		55-144		
Dieldrin	0.066 U	0.066	0.34	ug/kg	112		65-129		
Endosulfan I	0.044 U	0.044	0.17	ug/kg	76		45-123		
Endosulfan II	0.066 U	0.066	0.34	ug/kg	105		63-127		
Endosulfan Sulfate	0.066 U	0.066	0.34	ug/kg	129		72-138		
Endrin	0.066 U	0.066	0.34	ug/kg	110		62-129		
Endrin Aldehyde	0.066 U	0.066	0.34	ug/kg	103		55-132		
Endrin Ketone	0.066 U	0.066	0.34	ug/kg	117		69-139		
Heptachlor	0.060 U	0.060	0.17	ug/kg	91		43-124		
Heptachlor Epoxide	0.034 U	0.034	0.17	ug/kg	103		65-131		
Methoxychlor	0.34 U	0.34	1.7	ug/kg	120		59-125		
Mirex	0.066 U	0.066	0.34	ug/kg					
Toxaphene	2.2 U	2.2	6.6	ug/kg					
Batch number: 112711026001A Sample number(s): 6419488-6419494, 6419497-6419504									
Antimony	0.0740 U	0.0740	0.200	mg/kg	101		10-224		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Arsenic	0.0800 U	0.0800	0.400	mg/kg	104		78-122		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	103		80-120		
Cadmium	0.0440 U	0.0440	0.100	mg/kg	105		81-119		
Chromium	0.120 U	0.120	0.400	mg/kg	113		77-123		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	99		80-119		
Copper	0.0800 U	0.0800	0.400	mg/kg	101		78-122		
Lead	0.0102 U	0.0102	0.200	mg/kg	106		77-123		
Nickel	0.100 U	0.100	0.400	mg/kg	108		80-120		
Silver	0.0142 U	0.0142	0.100	mg/kg	106		66-134		
Thallium	0.0300 U	0.0300	0.100	mg/kg	107		75-124		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	114		76-124		
Zinc	0.560 U	0.560	3.00	mg/kg	107		79-121		
Batch number: 112711026001B	Sample number(s): 6419488-6419494, 6419497-6419504								
Selenium	0.0580 U	0.0580	0.400	mg/kg	109		77-123		
Batch number: 112711026001C	Sample number(s): 6419488-6419494, 6419497-6419504								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	109		76-123		
Batch number: 112711026001D	Sample number(s): 6419488-6419494, 6419497-6419504								
Barium	0.106 U	0.106	0.400	mg/kg	106		80-120		
Batch number: 112715708001	Sample number(s): 6419488-6419494, 6419497-6419504								
Aluminum	8.80 J	6.05	20.0	mg/kg	143		42-158		
Boron	0.527 J	0.360	5.00	mg/kg	106		66-134		
Calcium	7.97 J	2.50	20.0	mg/kg	105		79-121		
Iron	12.9 J	2.61	20.0	mg/kg	140		51-149		
Lithium	0.62 U	0.62	2.0	mg/kg	102		80-120		
Magnesium	1.96 J	0.440	10.0	mg/kg	122		64-136		
Manganese	0.0430 J	0.0360	0.500	mg/kg	102		78-122		
Phosphorus	1.09 J	0.350	10.0	mg/kg	104		80-120		
Potassium	11.3 U	11.3	50.0	mg/kg	114		69-131		
Sodium	5.95 U	5.95	100	mg/kg	115		71-129		
Strontium	0.0680 J	0.0250	0.500	mg/kg	104		81-119		
Tin	1.38 J	0.320	10.0	mg/kg	101		74-126		
Titanium	0.0710 U	0.0710	1.00	mg/kg	87		80-120		
Zirconium	0.460 U	0.460	5.00	mg/kg	104		80-120		
Batch number: 112715711003	Sample number(s): 6419488-6419494, 6419497-6419504								
Mercury	0.0069 U	0.0069	0.0979	mg/kg	100		72-128		
Batch number: 11276621201A	Sample number(s): 6419488-6419492, 6419494, 6419497-6419502								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	90		90-110		
Batch number: 11276621201B	Sample number(s): 6419503-6419504								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	90		90-110		
Batch number: 11277621201A	Sample number(s): 6419488-6419492, 6419494, 6419497-6419501								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	114		85-115		
Batch number: 11277621201B	Sample number(s): 6419502-6419504								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	114		85-115		
Batch number: 11278243201A	Sample number(s): 6419488-6419492, 6419494, 6419497-6419504								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	90		80-120		
Batch number: 11283039401A	Sample number(s): 6419488-6419491, 6419494, 6419497-6419500								
17a pH by 9045C					100		95-105		

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11283039401B 17a pH by 9045C	Sample number(s): 6419501-6419504				100		95-105		
Batch number: 11273162401B 28a Moisture Content by 160.3	Sample number(s): 6419488-6419495, 6419497-6419504				100		80-120		
Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11274SLG026	Sample number(s): 6419488-6419493, 6419497-6419504 UNSPK: 6419491								
Acenaphthene	93	93	63-105	0	30				
Acenaphthylene	87	93	67-114	6	30				
Anthracene	94	99	73-115	5	30				
Benzo(a)anthracene	95	98	59-128	3	30				
Benzo(a)pyrene	101	100	58-142	1	30				
Benzo(b)fluoranthene	96	94	54-163	2	30				
Benzo(g,h,i)perylene	66	71	33-141	8	30				
Benzo(k)fluoranthene	111	107	57-153	4	30				
Butylbenzylphthalate	138	123	57-173	12	30				
Di-n-butylphthalate	114	115	65-148	1	30				
Chrysene	99	96	67-123	4	30				
Dibenz(a,h)anthracene	73	82	22-133	12	30				
Diethylphthalate	94	99	70-136	6	30				
Dimethylphthalate	98	101	74-118	3	30				
Bis(2-Ethylhexyl)phthalate	197*	153	39-167	21	30				
Fluoranthene	113	103	51-149	9	30				
Fluorene	94	100	66-122	6	30				
Indeno(1,2,3-cd)pyrene	73	80	21-143	8	30				
1-Methylnaphthalene	87	89	72-123	3	30				
2-Methylnaphthalene	87	89	64-103	2	30				
Naphthalene	87	90	61-102	3	30				
N-Nitrosodimethylamine	83	87	48-113	5	30				
Di-n-octylphthalate	157	124	40-192	21	30				
Phenanthrene	95	94	62-122	2	30				
Pyrene	101	93	51-131	9	30				
Batch number: 11277SLC026	Sample number(s): 6419488-6419493, 6419497-6419504 UNSPK: 6419491								
Acenaphthene	102	96	75-115	4	30				
Acenaphthylene	110	105	81-110	3	30				
Aniline	61	62	18-116	3	30				
Anthracene	108	103	75-115	4	30				
Benazidine	0*	0*	35-141	0	30				
Benzo(a)anthracene	105	104	65-122	0	30				
Benzo(a)pyrene	101	103	57-126	3	30				
Benzo(b)fluoranthene	104	102	59-125	1	30				
Benzo(g,h,i)perylene	112	115	59-127	4	30				
Benzo(k)fluoranthene	96	97	56-132	2	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

Sample Matrix Quality Control

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

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzoic acid	57	40	10-173	34*	30				
Benzyl alcohol	98	95	67-115	2	30				
4-Bromophenyl-phenylether	102	98	67-129	3	30				
Butylbenzylphthalate	109	108	73-134	1	30				
Di-n-butylphthalate	104	100	67-123	3	30				
Carbazole	104	100	64-120	3	30				
4-Chloro-3-methylphenol	98	99	62-122	2	30				
4-Chloroaniline	41	38	13-107	7	30				
bis(2-Chloroethoxy)methane	93	91	75-104	2	30				
bis(2-Chloroethyl)ether	90	89	60-116	1	30				
bis(2-Chloroisopropyl)ether	84	81	55-142	2	30				
2-Chloronaphthalene	88	81	50-141	8	30				
2-Chlorophenol	99	98	73-121	0	30				
4-Chlorophenyl-phenylether	94	87	80-109	6	30				
Chrysene	101	99	62-128	1	30				
Dibenz(a,h)anthracene	115	114	65-125	1	30				
Dibenzofuran	98	93	71-112	4	30				
1,2-Dichlorobenzene	82	83	66-108	3	30				
1,3-Dichlorobenzene	81	82	63-109	3	30				
1,4-Dichlorobenzene	80	81	58-108	3	30				
3,3'-Dichlorobenzidine	62	65	28-109	6	30				
2,4-Dichlorophenol	97	95	66-123	1	30				
Diethylphthalate	98	92	66-118	4	30				
2,4-Dimethylphenol	101	97	68-118	2	30				
3,5-Dimethylphenol	97	95	71-127	0	30				
Dimethylphthalate	99	90	64-118	8	30				
4,6-Dinitro-2-methylphenol	63	55	11-126	12	30				
2,4-Dinitrophenol	34	23	20-143	36*	30				
2,4-Dinitrotoluene	92	87	56-129	5	30				
2,6-Dinitrotoluene	99	97	69-123	1	30				
1,2-Diphenylhydrazine	109	106	71-129	2	30				
bis(2-Ethylhexyl)phthalate	113	110	63-122	2	30				
Fluoranthene	106	100	73-112	4	30				
Fluorene	104	96	63-121	6	30				
Hexachlorobenzene	93	92	77-114	0	30				
Hexachlorobutadiene	84	83	62-120	0	30				
Hexachlorocyclopentadiene	49	42	10-153	13	30				
Hexachloroethane	74	77	57-109	5	30				
Indeno(1,2,3-cd)pyrene	115	119	61-126	4	30				
Isophorone	94	93	73-102	0	30				
1-Methylnaphthalene	91	92	64-122	2	30				
2-Methylnaphthalene	96	95	76-114	0	30				
2-Methylphenol	99	96	75-111	1	30				
4-Methylphenol	94	88	59-123	5	30				
Naphthalene	93	93	72-116	1	30				
2-Nitroaniline	96	90	67-125	6	30				
3-Nitroaniline	91	86	59-122	5	30				
4-Nitroaniline	82	67	41-109	19	30				
Nitrobenzene	94	98	57-125	5	30				
2-Nitrophenol	97	97	56-127	2	30				
4-Nitrophenol	92	86	37-129	6	30				
N-Nitroso-di-n-propylamine	86	86	60-116	2	30				
N-Nitrosodimethylamine	85	83	47-116	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
N-Nitrosodiphenylamine	110	105	71-122	3	30				
Di-n-octylphthalate	99	98	56-126	0	30				
Pentachlorophenol	46	68	28-127	39*	30				
Phenanthrene	102	99	65-125	1	30				
Phenol	95	92	58-126	2	30				
Pyrene	100	101	74-126	2	30				
1,2,4-Trichlorobenzene	87	89	72-115	3	30				
2,4,5-Trichlorophenol	98	94	58-129	2	30				
2,4,6-Trichlorophenol	109	98	56-134	10	30				
Batch number: 112770013A Sample number(s): 6419488-6419493,6419495-6419504 UNSPK: 6419491									
2,4-D	229*	63	17-180	114*	35				
Dalapon	22	0*	10-125	200*	50				
2,4-DB	0*	0*	10-201	0	50				
Dicamba	0*	0*	10-190	0	50				
Dinoseb	0*	6*	10-46	200*	35				
2,4-DP (Dichlorprop)	0*	0*	33-178	0	50				
MCPA	0*	0*	10-213	0	50				
MCPP (Mecoprop)	0*	0*	10-184	0	50				
2,4,5-T	58	51	10-156	13	35				
2,4,5-TP	0*	0*	24-141	0	35				
Batch number: 112740010A Sample number(s): 6419488-6419493,6419495-6419504 UNSPK: 6419491									
PCB-1016	80	80	29-146	0	50				
PCB-1260	43	47	39-149	4	50				
Batch number: 112780013A Sample number(s): 6419488-6419493,6419495-6419504 UNSPK: 6419491									
Aldrin	61	67	16-126	10	50				
Alpha BHC	62	65	10-129	5	50				
Beta BHC	41	53	14-147	27	50				
Gamma BHC - Lindane	74	82	10-140	11	50				
p,p-DDD	0*	91	16-163	200*	50				
p,p-DDE	58	88	18-161	19	50				
p,p-DDT	35	49	10-176	7	50				
Delta BHC	81	88	23-140	7	50				
Dieldrin	69	76	19-154	10	50				
Endosulfan I	74	68	16-137	8	50				
Endosulfan II	86	66	28-154	26	50				
Endosulfan Sulfate	72	89	21-160	21	50				
Endrin	90	88	11-149	2	50				
Endrin Aldehyde	0*	20	10-148	26	35				
Endrin Ketone	86	85	22-165	2	50				
Heptachlor	68	74	13-126	8	50				
Heptachlor Epoxide	124	100	13-157	22	50				
Methoxychlor	55	61	32-147	11	50				
Batch number: 112711026001A Sample number(s): 6419488-6419494,6419497-6419504 UNSPK: 6419491 BKG: 6419491									
Antimony	54*	50*	75-125	5	20	0.433	0.397	9 (1)	20
Arsenic	187*	150*	75-125	7	20	7.31	7.26	1	20
Beryllium	81	76	75-125	4	20	0.399	0.375	6 (1)	20
Cadmium	143*	143*	75-125	1	20	0.292	0.229	24* (1)	20
Chromium	181 (2)	164 (2)	75-125	3	20	53.8	51.7	4	20
Cobalt	112	113	75-125	0	20	7.37	6.84	8	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Copper	131*	134*	75-125	1	20	7.32	7.11	3	20
Lead	7 (2)	117 (2)	75-125	8	20	39.8	35.7	11	20
Nickel	147*	143*	75-125	2	20	14.0	12.9	8	20
Silver	139*	140*	75-125	0	20	0.0369 J	0.0344 J	7 (1)	20
Thallium	134*	141*	75-125	3	20	0.171	0.158	7 (1)	20
Vanadium	213 (2)	202 (2)	75-125	1	20	97.4	94.9	3	20
Zinc	123 (2)	131 (2)	75-125	1	20	72.2	70.2	3	20
Batch number: 112711026001B	Sample number(s): 6419488-6419494, 6419497-6419504 UNSPK: 6419491 BKG: 6419491								
Selenium	137*	135*	75-125	2	20	0.255 J	0.242 J	5 (1)	20
Batch number: 112711026001C	Sample number(s): 6419488-6419494, 6419497-6419504 UNSPK: 6419491 BKG: 6419491								
Molybdenum	145*	147*	75-125	0	20	0.752	0.703	7	20
Batch number: 112711026001D	Sample number(s): 6419488-6419494, 6419497-6419504 UNSPK: 6419491 BKG: 6419491								
Barium	133 (2)	131 (2)	75-125	0	20	68.9	63.6	8	20
Batch number: 112715708001	Sample number(s): 6419488-6419494, 6419497-6419504 UNSPK: 6419491 BKG: 6419491								
Aluminum	948 (2)	956 (2)	75-125	0	20	12,100	12,000	0	20
Boron	92	94	84-115	2	20	7.44	7.66	3 (1)	20
Calcium	335 (2)	259 (2)	75-125	5	20	5,120	5,130	0	20
Iron	330 (2)	763 (2)	75-125	2	20	22,700	23,000	1	20
Lithium	97	97	82-114	0	20	16.1	16.4	2	20
Magnesium	144 (2)	192 (2)	75-125	2	20	5,590	5,630	1	20
Manganese	105 (2)	123 (2)	75-125	2	20	303	291	4	20
Phosphorus	103 (2)	93 (2)	75-125	1	20	872	873	0	20
Potassium	124	125	75-125	0	20	1,750	1,760	1	20
Sodium	101	101	75-125	0	20	123	123	0 (1)	20
Strontium	98	99	75-115	1	20	21.8	21.7	1	20
Tin	91	91	80-110	1	20	2.98 J	3.08 J	3 (1)	20
Titanium	529 (2)	548 (2)	75-125	1	20	1,230	1,270	2	20
Zirconium	94	94	81-110	0	20	12.4	13.1	5 (1)	20
Batch number: 112715711003	Sample number(s): 6419488-6419494, 6419497-6419504 UNSPK: 6419491 BKG: 6419491								
Mercury	79	91	65-135	15	20	0.0132 J	0.0068 U	200* (1)	20
Batch number: 11276621201A	Sample number(s): 6419488-6419492, 6419494, 6419497-6419502 UNSPK: 6419491 BKG: 6419491								
11a Anions by 300.0 - Fluoride	50*		80-120			4.5	3.5	27* (1)	20
Batch number: 11276621201B	Sample number(s): 6419503-6419504 UNSPK: 6419503 BKG: 6419503								
11a Anions by 300.0 - Fluoride	76*		80-120			1.2	1.9	42* (1)	20
Batch number: 11277621201A	Sample number(s): 6419488-6419492, 6419494, 6419497-6419501 UNSPK: 6419491 BKG: 6419491								
7a Perchlorate EPA 314.0	115		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11277621201B	Sample number(s): 6419502-6419504 UNSPK: P419519 BKG: P419519								
7a Perchlorate EPA 314.0	112		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11278243201A	Sample number(s): 6419488-6419492, 6419494, 6419497-6419504 UNSPK: 6419491 BKG: 6419491								
3a Cr VI by EPA 7199	85		75-125			0.20 U	0.20 U	0 (1)	20

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11283039401A 17a pH by 9045C	Sample number(s): 6419488-6419491, 6419494, 6419497-6419500 BKG: 6419491 6.04 6.06 0 3								
Batch number: 11283039401B 17a pH by 9045C	Sample number(s): 6419501-6419504 BKG: P419519 8.19 8.19 0 3								
Batch number: 11273162401B 28a Moisture Content by 160.3	Sample number(s): 6419488-6419495, 6419497-6419504 BKG: 6419491 0.67 0.62 7 (1) 20								
Moisture Content by 160.3	0.67 0.62 7 (1) 20								
Moisture Content by 160.3	0.67 0.62 7 (1) 20								

Surrogate Quality Control

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

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11274SLG026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6419488	92	85	91
6419489	98	89	92
6419490	99	88	92
6419491	80	71	72
6419492	103	84	88
6419493	100	84	88
6419497	99	90	97
6419498	91	84	95
6419499	95	87	90
6419500	94	84	93
6419501	62	67	119
6419502	91	84	90
6419503	80	73	94
6419504	84	80	90
Blank	89	83	50
LCS	97	84	90
MS	103	84	88
MSD	100	84	88
Limits:	40-130	45-130	45-135

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 11277SLC026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6419488	99	104	90	91	91	88
6419489	102	107	80	92	94	87
6419490	91	95	89	84	89	84
6419491	91	97	82	92	96	86

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

Surrogate Quality Control

6419492	97	102	87	93	98	84
6419493	96	102	81	94	92	86
6419497	102	105	89	87	108	94
6419498	82	85	77	79	79	76
6419499	94	97	78	87	91	84
6419500	90	92	83	83	83	82
6419501	90	98	81	89	92	81
6419502	100	102	85	91	92	85
6419503	95	97	86	91	93	84
6419504	99	103	89	93	95	85
Blank	101	109	90	100	108	97
LCS	89	95	90	92	91	86
MS	97	102	87	93	98	84
MSD	96	102	81	94	92	86

Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112740010A

Tetrachloro-m-xylene Decachlorobiphenyl

6419488	94	95
6419489	95	93
6419490	92	93
6419491	91	82
6419492	91	92
6419493	89	84
6419495	95	94
6419496	98	101
6419497	94	138*
6419498	84	86
6419499	92	86
6419500	90	88
6419501	70	68
6419502	90	89
6419503	81	75
6419504	86	84
Blank	90	96
LCS	92	97
LCS	97	106
MS	91	92
MSD	89	84

Limits:	53-139	45-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 112770013A

2,4-Dichlorophenylacetic
acid

6419488	106
6419489	109
6419490	82
6419491	118
6419492	116
6419493	103
6419495	113

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/20/11 at 12:55 PM

Group Number: 1268378

Surrogate Quality Control

6419496 79
6419497 98
6419498 69
6419499 80
6419500 96
6419501 121
6419502 100
6419503 88
6419504 119
Blank 92
LCS 91
MS 116
MSD 103

Limits: 36-156

Analysis Name: 12a Pesticides by 8081A

Batch number: 112780013A

Tetrachloro-m-xylene Decachlorobiphenyl

6419488	77	123*
6419489	54	77
6419490	78	102
6419491	80	116
6419492	62	90
6419493	64	100
6419495	69	110
6419496	85	88
6419497	142*	1601*
6419498	58	0*
6419499	63	145*
6419500	64	74
6419501	60	80
6419502	58	70
6419503	65	83
6419504	59	104
Blank	85	125*
LCS	84	128*
MS	62	90
MSD	64	100

Limits: 50-130

20-120

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

CHAIN OF CUSTODY RECORD

18013/1703312/6419488-504

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS										SS ONLY		Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.						*Metals EPA 601/602/20B&7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Pesticides EPA 314.0	*Hex Chrome EPA 7199	*T.H. EPA 8045C/9040B	Pesticide Confirmation by EPA 8850 (10%)	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	*VOCs EPA 8260B \$	
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers													
SL-001-SA3-SS-0.0-0.5	9/26/11	0750	SOIL	NONE	1-SS Sleeve			X	X									
SL-001-SA3-SS-0.0-0.5	9/26/11	0750	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
SL-002-SA3-SS-0.0-0.5	9/26/11	0815	SOIL	NONE	1-SS Sleeve			X	X									
SL-002-SA3-SS-0.0-0.5	9/26/11	0815	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
SL-002-SA5DS-SS-0.0-0.5	9/26/11	1435	SOIL	NONE	1-SS Sleeve			X	X									
SL-002-SA5DS-SS-0.0-0.5	9/26/11	1435	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
SL-001-SA5D-SS-0.0-0.5MS	9/26/11	1505	SOIL	NONE	2-SS Sleeves			X	X								MS/MSD sample	
SL-001-SA5D-SS-0.0-0.5MS	9/26/11	1505	SOIL	NONE	2-16 oz. jars	X	X			X	X	X	X		X	X	MS/MSD sample	
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	2-Encores												x PC PB KINGSDOM	
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	1-SS Sleeve			X	X									
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
SL-027-SA5DS-SS-0.0-0.5	9/26/11	0925	SOIL	NONE	1-SS Sleeve			X	X									
SL-027-SA5DS-SS-0.0-0.5	9/26/11	0925	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
SL-028-SA5DS-SS-0.0-0.5	9/26/11	1050	SOIL	NONE	1-SS Sleeve			X	X									
SL-028-SA5DS-SS-0.0-0.5	9/26/11	1050	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
SL-029-SA5DS-SS-0.0-0.5	9/26/11	1110	SOIL	NONE	1-SS Sleeve			X	X									
SL-029-SA5DS-SS-0.0-0.5	9/26/11	1110	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
SL-030-SA5DS-SS-0.0-0.5	9/26/11	1125	SOIL	NONE	1-SS Sleeve			X	X									
SL-030-SA5DS-SS-0.0-0.5	9/26/11	1125	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
SL-031-SA5DS-SS-0.0-0.5	9/26/11	1150	SOIL	NONE	1-SS Sleeve			X	X									
SL-031-SA5DS-SS-0.0-0.5	9/26/11	1150	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
SL-032-SA5DS-SS-0.0-0.5	9/26/11	1210	SOIL	NONE	1-SS Sleeve			X	X									
SL-032-SA5DS-SS-0.0-0.5	9/26/11	1210	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
DUP01-SA5DS-QC-092611	9/26/11	1510	SOIL	NONE	1-SS Sleeve			X	X									
DUP01-SA5DS-QC-092611	9/26/11	1510	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X		
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Laboratory:												
		09/26/2011 / 1630				Lancaster Laboratories, Inc.												
Received by: (Signature)		Date/Time		Airbill No.(s)														
				8767 9858 3428; 8767 9858 3439 8767 9858 3440														

CHAIN OF CUSTODY RECORD

13013/1268378/G419488-504

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING				PRIMARY FOR ALL LOCATIONS				SS ONLY		SECONDARY FOR ALL LOCATIONS												Other Instructions and Notes								
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels ‡ Moisture by EPA 160.2 will be performed on soil in 16 oz. Jar collected from the same interval from which Encores were collected For samples collected from Subarea 5 (SA5) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.																																
Samplers Signatures:																								Revised COC								
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	Metalis EPA 8010/8203/8747A	Fluoride EPA 300.0	SVOCS EPA 8270C & PAHs 8270 SIM	PCBs/PC's EPA 8082	Dioxin/furan EPA 16319	Perchlorate EPA 314.0	Hex Chlorine EPA 7199	pH EPA 8045C/9040B	Perchlorate Confirmation by EPA 8950 (10%)	Pesticides EPA 8081 (surface soil only)	Herbicides EPA 8151 (surface soil only)	VOCs EPA 8260B §	1,4-Dioxane EPA 8260SIM §	TPH-CRO EPA 8015B §	TPH-LEH EPA 8015B Mod.	Nitrate EPA 300.0	Formaldehyde EPA 8315A	m-NOMA EPA 1625C			Enametics EPA 8330A	Cyanide EPA 9012B	Tarphenyle EPA 9015B	Glycols EPA 8015B	Alcohols EPA 8015B	Downal EPA 8270	
SL-102-SA7-SB-4.5MS	9/26/11	0905	SOIL	NONE	4-Encores														X													2 Extra Encores collected
SL-102-SA7-SB-4.0-5.0MS	9/26/11	0910	SOIL	NONE	9-16 oz Jars	X	X	X	X	X	X	X	X						X	X	X	X				X	X	X	X			MS/MSD Sample
SL-102-SA7-SB-9.5	9/26/11	0933	SOIL	NONE	2-Encores													X														MS/MSD Sample
SL-102-SA7-SB-9.0-10.0	9/26/11	0930	SOIL	NONE	3-16 oz Jars	X	X	X	X	X	X	X	X						X	X	X	X				X	X	X	X			
SL-109-SA7-SB-4.5	9/26/11	1210	SOIL	NONE	2-Encores													X														
SL-109-SA7-SB-4.0-5.0	9/26/11	1213	SOIL	NONE	3-16 oz Jars	X	X	X	X	X	X	X	X						X	X	X	X				X	X	X	X			
SL-109-SA7-SB-9.5	9/26/11	1218	SOIL	NONE	2-Encores													X														
SL-109-SA7-SB-9.0-10.0	9/26/11	1220	SOIL	NONE	3-16 oz Jars	X	X	X	X	X	X	X	X						X	X	X	X				X	X	X	X			
SL-125-SA7-SB-4.0-5.0MS	9/26/11	1452	SOIL	NONE	6-16 oz jars	X	X	X	X	X	X	X	X																			MS/MSD Sample
SL-170-SA7-SB-4.5	9/26/11	1110	SOIL	NONE	2-Encores													X														
SL-170-SA7-SB-4.0-5.0	9/26/11	1115	SOIL	NONE	3-16 oz Jars	X	X	X	X	X	X	X	X						X	X	X	X				X	X	X	X			
SL-170-SA7-SB-9.5	9/26/11	1123	SOIL	NONE	2-Encores													X														
SL-170-SA7-SB-9.0-10.0	9/26/11	1130	SOIL	NONE	3-16 oz Jars	X	X	X	X	X	X	X	X						X	X	X	X				X	X	X	X			
DUP007-SA7-QC-092611	9/26/11	0923	SOIL	NONE	8-Encores													X														
DUP007-SA7-QC-092611	9/26/11	0923	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X						X	X	X	X				X	X	X	X			
DUP008-SA7-QC-092611	9/26/11	1500	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X																			
TB-092611	9/26/11	1430	WATER	NONE	2-40mL vials													X														
Relinquished by: (Signature)			Date/Time			Received for Laboratory by: (Signature)																		Laboratory:								
			09/19/2011 / 1600																					Lancaster Laboratories, Inc.								
Received by: (Signature)			Date/Time			Airbill No.(s)																										
						8767 9858 3428; 8767 9858 3439 8767 9858 3440																										

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SS ONLY		Other instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.							*Metals EPA 6010/6020B&7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 8045C/8040B	Perchlorate Confirmation by EPA 6850 (10%)	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	VOCs/EPA 8260B \$	
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers														
SL-001-SA3-SS-0.0-0.5	9/26/11	0750	SOIL	NONE	1-SS Sleeve			X	X										
SL-001-SA3-SS-0.0-0.5	9/26/11	0750	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
SL-002-SA3-SS-0.0-0.5	9/26/11	0815	SOIL	NONE	1-SS Sleeve			X	X										
SL-002-SA3-SS-0.0-0.5	9/26/11	0815	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
SL-002-SA5DS-SS-0.0-0.5	9/26/11	1435	SOIL	NONE	1-SS Sleeve			X	X										
SL-002-SA5DS-SS-0.0-0.5	9/26/11	1435	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
SL-021-SA5D-SS-0.0-0.5MS	9/26/11	1505	SOIL	NONE	2-SS Sleeves			X	X							MS/MSD sample			
SL-021-SA5D-SS-0.0-0.5MS	9/26/11	1505	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X			
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	2-Encores											X			
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	1-SS Sleeve			X	X										
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
SL-027-SA5DS-SS-0.0-0.5	9/26/11	0925	SOIL	NONE	1-SS Sleeve			X	X										
SL-027-SA5DS-SS-0.0-0.5	9/26/11	0925	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
SL-028-SA5DS-SS-0.0-0.5	9/26/11	1050	SOIL	NONE	1-SS Sleeve			X	X										
SL-028-SA5DS-SS-0.0-0.5	9/26/11	1050	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
SL-029-SA5DS-SS-0.0-0.5	9/26/11	1110	SOIL	NONE	1-SS Sleeve			X	X										
SL-029-SA5DS-SS-0.0-0.5	9/26/11	1110	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
SL-030-SA5DS-SS-0.0-0.5	9/26/11	1125	SOIL	NONE	1-SS Sleeve			X	X										
SL-030-SA5DS-SS-0.0-0.5	9/26/11	1125	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
SL-031-SA5DS-SS-0.0-0.5	9/26/11	1150	SOIL	NONE	1-SS Sleeve			X	X										
SL-031-SA5DS-SS-0.0-0.5	9/26/11	1150	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
SL-032-SA5DS-SS-0.0-0.5	9/26/11	1210	SOIL	NONE	1-SS Sleeve			X	X										
SL-032-SA5DS-SS-0.0-0.5	9/26/11	1210	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
DUP01-SA5DS-QC-092611	9/26/11	1510	SOIL	NONE	1-SS Sleeve			X	X										
DUP01-SA5DS-QC-092611	9/26/11	1510	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X		X	X			
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)										Laboratory:					
		09/26/2011 / 1630												Lancaster Laboratories, Inc.					
Received by: (Signature)		Date/Time		Air Bill No(s)															
				8767 9858 3428; 8767 9858 3439 8767 9858 3440															

Nicole Maljovec

From: Bloisa, Peggy [BloisaMJ@cdm.com]
Sent: Thursday, September 29, 2011 10:22 AM
To: Nicole Maljovec; SA Env Entry
Cc: Hartman, Pamela
Subject: RE: SSFL COC for 9/28
Attachments: COC_09_28_11 revised.xlsx

I have revised the Subarea 5D South COC from yesterday to include samples for perchlorate confirmation. See attached.

Also I will not be submitting the encores associated with sample SA-026-SA5DS-SS-0.0-0.5 included on the COC dated 9/26.

Thanks! Peggy

From: Bloisa, Peggy
Sent: Wednesday, September 28, 2011 5:42 PM
To: 'Nicole Maljovec'; 'SA Env Entry'
Cc: Burgesser, Todd; Zakowski, Cherie; 'Laura Rainey'; Hartman, Pamela
Subject: RE: SSFL COC for 9/28

Attached is COC for 9/28/11. Surface sampling was completed in Subarea 5D South today.

Peggy

Peggy Bloisa, P.G.
CDM
|100 Pringle Avenue Suite 300| Walnut Creek, CA 94596|
|Phone and Fax: (925) 296-8053|



Please consider the environment before printing this email.

Nicole Maljovec

From: Bloisa, Peggy [BloisaMJ@cdm.com]
Sent: Tuesday, September 27, 2011 7:33 PM
To: Nicole Maljovec; SA Env Entry
Cc: Burgesser, Todd; Zakowski, Cherie; Laura Rainey; Hartman, Pamela
Subject: SSFL COCs for 9/26 and 9/27
Attachments: COC_09_27_11.xlsx; COC_09_26_11 revised.xlsx

Attached is today's COC and a revised COC for yesterday 9/26. The sample shown as SL-021-002-SA5DS-SS-0.0-0.5 collected at 1505 as shown on yesterdays COC should have been labeled as SL-001. The "real" SL-021 was sampled today.

Peggy

Peggy Bloisa, P.G.

CDM

| 100 Pringle Avenue Suite 300 | Walnut Creek, CA 94596 |

| Phone and Fax: (925) 296-8053 |



Please consider the environment before printing this email.

9/30/2011

Nicole Maljovec

From: Bloisa, Peggy [BloisaMJ@cdm.com]
Sent: Monday, September 26, 2011 8:50 PM
To: Nicole Maljovec; SA Env Entry
Subject: SSFL COC for 9/26/2011
Attachments: COC_09_26_11.xlsx

Hi Nicole – see attached COC. Four of the Encore samplers collected for SL-102-SA7-SB-4.5MS and the Encores (2 encore samplers) for SL-026-SA5DS-SS-0.0-0.5 did not get included in the coolers (found them after the courier left – it was a typical Monday).

The sampler for SL-026 didn't know to collect enough Encores for VOCs, dioxane, and TPH-GRO (should have been five) and I assumed ☹ he incorrectly collected the encores for TPH-GRO only. I will send the remaining encores for SL-102, but I am going to ask John tomorrow about the other location, and will let you know if he wants us to recollect those encores and resubmit them.

Thanks! Peggy

Peggy Bloisa, P.G.
CDM
|100 Pringle Avenue Suite 300| Walnut Creek, CA 94596|
|Phone and Fax: (925) 296-8053|



Please consider the environment before printing this email.

9/30/2011

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

October 18, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/27/2011

Group Number: 1268380

SDG: DX142

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-001-SA3-SS-0.0-0.5 Soil	6419507
SL-002-SA3-SS-0.0-0.5 Soil	6419508
SL-002-SA5DS-SS-0.0-0.5 Soil	6419509
SL-001-SA5DS-SS-0.0-0.5 Soil	6419510
SL-001-SA5DS-SS-0.0-0.5 MS Soil	6419511
SL-001-SA5DS-SS-0.0-0.5 MSD Soil	6419512
SL-026-SA5DS-SS-0.0-0.5 Soil	6419513
SL-027-SA5DS-SS-0.0-0.5 Soil	6419514
SL-028-SA5DS-SS-0.0-0.5 Soil	6419515
SL-029-SA5DS-SS-0.0-0.5 Soil	6419516
SL-030-SA5DS-SS-0.0-0.5 Soil	6419517
SL-031-SA5DS-SS-0.0-0.5 Soil	6419518

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

ELECTRONIC CDM Federal Services Program
COPY TO
ELECTRONIC Data Package Group
COPY TO

Attn: Todd Burgess

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

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

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Page 1 of 4

Sample Description: SL-001-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SS-0.0-0.5

LLI Sample # SW 6419507
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 07:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD001 SDG#: DX142-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
11625	Moisture Content by 160.3	n.a.	0.50 U	0.50	0.50	1

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

Sample Description: SL-001-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SS-0.0-0.5

LLI Sample # SW 6419507
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 07:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD001 SDG#: DX142-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0640 JQ	0.0488	0.964	1
11031	12378-PeCDD	40321-76-4	0.142 JQ	0.0428	4.82	1
11031	123478-HxCDD	39227-28-6	0.183 J	0.0448	4.82	1
11031	123678-HxCDD	57653-85-7	0.534 JB	0.0433	4.82	1
11031	123789-HxCDD	19408-74-3	0.450 JBQ	0.0412	4.82	1
11031	1234678-HpCDD	35822-46-9	7.87 B	0.0516	4.82	1
11031	OCDD	3268-87-9	72.8 B	0.0573	9.64	1
11031	2378-TCDF	51207-31-9	0.186 JQ	0.0673	0.964	1
11031	12378-PeCDF	57117-41-6	0.0337 U	0.0337	4.82	1
11031	23478-PeCDF	57117-31-4	0.208 JBQ	0.0386	4.82	1
11031	123478-HxCDF	70648-26-9	0.287 JQ	0.0378	4.82	1
11031	123678-HxCDF	57117-44-9	0.215 JQ	0.0289	4.82	1
11031	123789-HxCDF	72918-21-9	0.147 JQ	0.0455	4.82	1
11031	234678-HxCDF	60851-34-5	0.365 JBQ	0.0344	4.82	1
11031	1234678-HpCDF	67562-39-4	2.15 JB	0.0216	4.82	1
11031	1234789-HpCDF	55673-89-7	0.135 JB	0.0563	4.82	1
11031	OCDF	39001-02-0	5.56 JB	0.0765	9.64	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	59	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	46	26 - 138
13C12-OCDF	44	17 - 157

Dioxins/Furans Data Qualifiers:

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



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Sample Description: SL-001-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SS-0.0-0.5

LLI Sample # SW 6419507
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 07:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD001 SDG#: DX142-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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Page 4 of 4

Sample Description: SL-001-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SS-0.0-0.5

LLI Sample # SW 6419507
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 07:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD001 SDG#: DX142-11

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 04:39	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

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



Analysis Report

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Page 1 of 4

Sample Description: SL-002-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA3-SS-0.0-0.5

LLI Sample # SW 6419508
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 08:15

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD002 SDG#: DX142-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	0.50 U	0.50	0.50	1

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

Sample Description: SL-002-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA3-SS-0.0-0.5

LLI Sample # SW 6419508
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 08:15

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD002 SDG#: DX142-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0470 U	0.0470	0.987	1
11031	12378-PeCDD	40321-76-4	0.0471 U	0.0471	4.94	1
11031	123478-HxCDD	39227-28-6	0.176 JQ	0.0513	4.94	1
11031	123678-HxCDD	57653-85-7	0.460 JB	0.0473	4.94	1
11031	123789-HxCDD	19408-74-3	0.312 JBQ	0.0404	4.94	1
11031	1234678-HpCDD	35822-46-9	7.87 B	0.0576	4.94	1
11031	OCDD	3268-87-9	81.3 B	0.0597	9.87	1
11031	2378-TCDF	51207-31-9	0.242 J	0.0768	0.987	1
11031	12378-PeCDF	57117-41-6	0.176 JBQ	0.0459	4.94	1
11031	23478-PeCDF	57117-31-4	0.236 JBQ	0.0461	4.94	1
11031	123478-HxCDF	70648-26-9	0.465 J	0.0430	4.94	1
11031	123678-HxCDF	57117-44-9	0.186 J	0.0361	4.94	1
11031	123789-HxCDF	72918-21-9	0.0486 U	0.0486	4.94	1
11031	234678-HxCDF	60851-34-5	0.244 JBQ	0.0400	4.94	1
11031	1234678-HpCDF	67562-39-4	2.10 JB	0.0250	4.94	1
11031	1234789-HpCDF	55673-89-7	0.122 JBQ	0.0460	4.94	1
11031	OCDF	39001-02-0	6.98 JB	0.0582	9.87	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	98	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Page 3 of 4

Sample Description: SL-002-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA3-SS-0.0-0.5

LLI Sample # SW 6419508
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 08:15

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD002 SDG#: DX142-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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Page 4 of 4

Sample Description: SL-002-SA3-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA3-SS-0.0-0.5

LLI Sample # SW 6419508
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 08:15

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD002 SDG#: DX142-12

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 05:35	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

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



Analysis Report

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Page 1 of 4

Sample Description: SL-002-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419509
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:35

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD025 SDG#: DX142-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	2.1	0.50	0.50	1

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

Sample Description: SL-002-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419509
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:35

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD025 SDG#: DX142-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0574 JQ	0.0441	0.986	1
11031	12378-PeCDD	40321-76-4	0.152 JQ	0.0435	4.93	1
11031	123478-HxCDD	39227-28-6	0.154 JQ	0.0398	4.93	1
11031	123678-HxCDD	57653-85-7	0.529 JB	0.0403	4.93	1
11031	123789-HxCDD	19408-74-3	0.655 JB	0.0401	4.93	1
11031	1234678-HpCDD	35822-46-9	6.48 B	0.0526	4.93	1
11031	OCDD	3268-87-9	54.8 B	0.0503	9.86	1
11031	2378-TCDF	51207-31-9	0.642 JQ	0.0987	0.986	1
11031	12378-PeCDF	57117-41-6	0.473 JB	0.0492	4.93	1
11031	23478-PeCDF	57117-31-4	1.09 JB	0.0492	4.93	1
11031	123478-HxCDF	70648-26-9	0.480 JQ	0.0419	4.93	1
11031	123678-HxCDF	57117-44-9	0.224 JQ	0.0371	4.93	1
11031	123789-HxCDF	72918-21-9	0.459 JQ	0.0451	4.93	1
11031	234678-HxCDF	60851-34-5	0.401 JB	0.0396	4.93	1
11031	1234678-HpCDF	67562-39-4	1.39 JB	0.0202	4.93	1
11031	1234789-HpCDF	55673-89-7	0.132 JB	0.0316	4.93	1
11031	OCDF	39001-02-0	2.64 JB	0.0490	9.86	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-002-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419509
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:35

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD025 SDG#: DX142-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

Sample Description: SL-002-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419509
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:35

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD025 SDG#: DX142-13

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 09:35	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-001-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419510
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	0.67	0.50	0.50	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419510
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0449 U	0.0449	0.987	1
11031	12378-PeCDD	40321-76-4	0.246 JQ	0.0485	4.94	1
11031	123478-HxCDD	39227-28-6	0.286 J	0.0527	4.94	1
11031	123678-HxCDD	57653-85-7	0.734 JB	0.0514	4.94	1
11031	123789-HxCDD	19408-74-3	0.789 JB	0.0528	4.94	1
11031	1234678-HpCDD	35822-46-9	13.6 B	0.0585	4.94	1
11031	OCDD	3268-87-9	135 B	0.0709	9.87	1
11031	2378-TCDF	51207-31-9	0.510 J	0.105	0.987	1
11031	12378-PeCDF	57117-41-6	1.23 JB	0.0636	4.94	1
11031	23478-PeCDF	57117-31-4	1.31 JB	0.0628	4.94	1
11031	123478-HxCDF	70648-26-9	0.260 J	0.0468	4.94	1
11031	123678-HxCDF	57117-44-9	0.419 J	0.0429	4.94	1
11031	123789-HxCDF	72918-21-9	0.120 JQ	0.0494	4.94	1
11031	234678-HxCDF	60851-34-5	0.314 JBQ	0.0438	4.94	1
11031	1234678-HpCDF	67562-39-4	2.62 JB	0.0303	4.94	1
11031	1234789-HpCDF	55673-89-7	0.221 JB	0.0487	4.94	1
11031	OCDF	39001-02-0	5.49 JB	0.0544	9.87	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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

Page 3 of 4

Sample Description: SL-001-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419510
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419510
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 10:31	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419511
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	0.67	0.50	0.50	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419511
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.8	0.0564	1.00	1
11031	12378-PeCDD	40321-76-4	99.8	0.0625	5.01	1
11031	123478-HxCDD	39227-28-6	99.4	0.0701	5.01	1
11031	123678-HxCDD	57653-85-7	96.9	0.0661	5.01	1
11031	123789-HxCDD	19408-74-3	103	0.0553	5.01	1
11031	1234678-HpCDD	35822-46-9	108	0.0738	5.01	1
11031	OCDD	3268-87-9	334	0.0896	10.0	1
11031	2378-TCDF	51207-31-9	19.6	0.0999	1.00	1
11031	12378-PeCDF	57117-41-6	97.4	0.0612	5.01	1
11031	23478-PeCDF	57117-31-4	95.5	0.0620	5.01	1
11031	123478-HxCDF	70648-26-9	96.2	0.131	5.01	1
11031	123678-HxCDF	57117-44-9	95.8	0.111	5.01	1
11031	123789-HxCDF	72918-21-9	94.2	0.0785	5.01	1
11031	234678-HxCDF	60851-34-5	95.1	0.0686	5.01	1
11031	1234678-HpCDF	67562-39-4	92.4	0.0722	5.01	1
11031	1234789-HpCDF	55673-89-7	94.2	0.0942	5.01	1
11031	OCDF	39001-02-0	195	0.104	10.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	35	26 - 152
13C12-123678-HxCDF	41	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	60	28 - 143
13C12-1234789-HpCDF	56	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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

Page 3 of 4

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419511
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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

Page 4 of 4

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MS Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419511
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 11:28	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

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



Analysis Report

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

Page 1 of 4

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419512
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	0.67	0.50	0.50	1

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

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419512
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.1	0.0555	1.00	1
11031	12378-PeCDD	40321-76-4	97.6	0.0598	5.02	1
11031	123478-HxCDD	39227-28-6	95.5	0.0774	5.02	1
11031	123678-HxCDD	57653-85-7	93.7	0.0725	5.02	1
11031	123789-HxCDD	19408-74-3	101	0.0652	5.02	1
11031	1234678-HpCDD	35822-46-9	105	0.0787	5.02	1
11031	OCDD	3268-87-9	322	0.0911	10.0	1
11031	2378-TCDF	51207-31-9	18.8	0.106	1.00	1
11031	12378-PeCDF	57117-41-6	95.5	0.0658	5.02	1
11031	23478-PeCDF	57117-31-4	92.7	0.0627	5.02	1
11031	123478-HxCDF	70648-26-9	89.1	0.135	5.02	1
11031	123678-HxCDF	57117-44-9	88.9	0.108	5.02	1
11031	123789-HxCDF	72918-21-9	90.3	0.0963	5.02	1
11031	234678-HxCDF	60851-34-5	91.2	0.0855	5.02	1
11031	1234678-HpCDF	67562-39-4	91.1	0.0614	5.02	1
11031	1234789-HpCDF	55673-89-7	92.4	0.0928	5.02	1
11031	OCDF	39001-02-0	184	0.105	10.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	95	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	41	26 - 152
13C12-123678-HxCDF	51	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	56	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Page 3 of 4

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419512
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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

Page 4 of 4

Sample Description: SL-001-SA5DS-SS-0.0-0.5 MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419512
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:05

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD021 SDG#: DX142-14MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 12:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

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



Analysis Report

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

Page 1 of 4

Sample Description: SL-026-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419513
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:35

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD026 SDG#: DX142-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	1.4	0.50	0.50	1

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

Sample Description: SL-026-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419513
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:35

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD026 SDG#: DX142-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.426 U	0.426	9.85	1
11031	12378-PeCDD	40321-76-4	0.401 U	0.401	49.2	1
11031	123478-HxCDD	39227-28-6	0.285 U	0.285	49.2	1
11031	123678-HxCDD	57653-85-7	0.485 JBQ	0.283	49.2	1
11031	123789-HxCDD	19408-74-3	0.277 U	0.277	49.2	1
11031	1234678-HpCDD	35822-46-9	6.83 JB	0.373	49.2	1
11031	OCDD	3268-87-9	49.6 JB	0.406	98.5	1
11031	2378-TCDF	51207-31-9	1.10 JC	0.791	9.85	1
11031	12378-PeCDF	57117-41-6	3.87 JB	0.442	49.2	1
11031	23478-PeCDF	57117-31-4	9.93 JB	0.396	49.2	1
11031	123478-HxCDF	70648-26-9	11.3 JB	0.498	49.2	1
11031	123678-HxCDF	57117-44-9	3.91 JB	0.433	49.2	1
11031	123789-HxCDF	72918-21-9	3.86 J	0.406	49.2	1
11031	234678-HxCDF	60851-34-5	4.40 JB	0.379	49.2	1
11031	1234678-HpCDF	67562-39-4	5.02 JB	0.315	49.2	1
11031	1234789-HpCDF	55673-89-7	4.10 JB	0.320	49.2	1
11031	OCDF	39001-02-0	8.98 JB	0.436	98.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	51	26 - 152
13C12-123678-HxCDF	55	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Page 3 of 4

Sample Description: SL-026-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419513
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:35

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD026 SDG#: DX142-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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

Page 4 of 4

Sample Description: SL-026-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419513
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:35

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD026 SDG#: DX142-15

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11285001	10/15/2011 12:15	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	2	11285001	10/12/2011 13:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

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



Analysis Report

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Page 1 of 4

Sample Description: SL-027-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-027-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419514
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:25

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD027 SDG#: DX142-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	1.2	0.50	0.50	1

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

Sample Description: SL-027-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-027-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419514
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:25

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD027 SDG#: DX142-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.128 U	0.128	0.973	1
11031	12378-PeCDD	40321-76-4	0.170 U	0.170	4.87	1
11031	123478-HxCDD	39227-28-6	0.158 U	0.158	4.87	1
11031	123678-HxCDD	57653-85-7	0.356 JBQ	0.154	4.87	1
11031	123789-HxCDD	19408-74-3	0.249 JBQ	0.145	4.87	1
11031	1234678-HpCDD	35822-46-9	9.15 B	0.186	4.87	1
11031	OCDD	3268-87-9	55.0 B	0.220	9.73	1
11031	2378-TCDF	51207-31-9	0.108 JQ	0.0936	0.973	1
11031	12378-PeCDF	57117-41-6	0.190 JBQ	0.0912	4.87	1
11031	23478-PeCDF	57117-31-4	0.427 JBQ	0.0845	4.87	1
11031	123478-HxCDF	70648-26-9	0.256 JQ	0.111	4.87	1
11031	123678-HxCDF	57117-44-9	0.105 U	0.105	4.87	1
11031	123789-HxCDF	72918-21-9	0.272 JQ	0.121	4.87	1
11031	234678-HxCDF	60851-34-5	0.372 JBQ	0.100	4.87	1
11031	1234678-HpCDF	67562-39-4	0.893 JBQ	0.153	4.87	1
11031	1234789-HpCDF	55673-89-7	0.597 JBQ	0.174	4.87	1
11031	OCDF	39001-02-0	2.01 JBQ	0.269	9.73	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	57	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	67	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	52	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Page 3 of 4

Sample Description: SL-027-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-027-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419514
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:25

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD027 SDG#: DX142-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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

Page 4 of 4

Sample Description: SL-027-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-027-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419514
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:25

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD027 SDG#: DX142-16

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 14:18	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

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



Analysis Report

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Page 1 of 4

Sample Description: SL-028-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419515
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD028 SDG#: DX142-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	0.56	0.50	0.50	1

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

Sample Description: SL-028-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419515
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD028 SDG#: DX142-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0478 U	0.0478	0.971	1
11031	12378-PeCDD	40321-76-4	0.188 JQ	0.0524	4.85	1
11031	123478-HxCDD	39227-28-6	0.301 JQ	0.0925	4.85	1
11031	123678-HxCDD	57653-85-7	0.451 JBQ	0.0968	4.85	1
11031	123789-HxCDD	19408-74-3	0.320 JBQ	0.0916	4.85	1
11031	1234678-HpCDD	35822-46-9	7.10 B	0.201	4.85	1
11031	OCDD	3268-87-9	57.5 B	0.259	9.71	1
11650	2378-TCDF-Conf	51207-31-9	0.788 JC	0.0759	0.971	1
11031	12378-PeCDF	57117-41-6	0.179 JB	0.0744	4.85	1
11031	23478-PeCDF	57117-31-4	0.855 JB	0.0688	4.85	1
11031	123478-HxCDF	70648-26-9	0.594 J	0.139	4.85	1
11031	123678-HxCDF	57117-44-9	0.461 JQ	0.0888	4.85	1
11031	123789-HxCDF	72918-21-9	0.109 JQ	0.0640	4.85	1
11031	234678-HxCDF	60851-34-5	0.470 JB	0.0551	4.85	1
11031	1234678-HpCDF	67562-39-4	1.78 JB	0.174	4.85	1
11031	1234789-HpCDF	55673-89-7	0.156 JBQ	0.127	4.85	1
11031	OCDF	39001-02-0	3.00 JB	0.224	9.71	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-2378-TCDF-Conf	74	24 - 169
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	59	23 - 140
13C12-OCDD	37	17 - 157
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	29	26 - 152
13C12-123678-HxCDF	46	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	39	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	34	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Sample Description: SL-028-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419515
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD028 SDG#: DX142-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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

Sample Description: SL-028-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419515
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 10:50

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 12:23

Suite 210

Chantilly VA 20151

SD028 SDG#: DX142-17

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 15:14	Joseph D Anderson	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11278001	10/12/2011 22:20	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-029-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-029-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419516
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:10

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD029 SDG#: DX142-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	3.4	0.50	0.50	1

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

Sample Description: SL-029-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-029-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419516
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:10

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD029 SDG#: DX142-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0467 U	0.0467	0.998	1
11031	12378-PeCDD	40321-76-4	0.0602 U	0.0602	4.99	1
11031	123478-HxCDD	39227-28-6	0.0913 JQ	0.0618	4.99	1
11031	123678-HxCDD	57653-85-7	0.121 JBQ	0.0635	4.99	1
11031	123789-HxCDD	19408-74-3	0.179 JBQ	0.0693	4.99	1
11031	1234678-HpCDD	35822-46-9	1.51 JB	0.104	4.99	1
11031	OCDD	3268-87-9	12.7 B	0.147	9.98	1
11031	2378-TCDF	51207-31-9	0.166 J	0.0778	0.998	1
11031	12378-PeCDF	57117-41-6	0.629 JB	0.0466	4.99	1
11031	23478-PeCDF	57117-31-4	0.655 JB	0.0464	4.99	1
11031	123478-HxCDF	70648-26-9	0.605 JQ	0.0552	4.99	1
11031	123678-HxCDF	57117-44-9	0.336 JQ	0.0459	4.99	1
11031	123789-HxCDF	72918-21-9	0.122 J	0.0617	4.99	1
11031	234678-HxCDF	60851-34-5	0.202 JB	0.0497	4.99	1
11031	1234678-HpCDF	67562-39-4	0.542 JB	0.0547	4.99	1
11031	1234789-HpCDF	55673-89-7	0.0976 U	0.0976	4.99	1
11031	OCDF	39001-02-0	1.09 JB	0.177	9.98	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	65	23 - 140
13C12-OCDD	49	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	49	26 - 138
13C12-OCDF	37	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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

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Sample Description: SL-029-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-029-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419516
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:10

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD029 SDG#: DX142-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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Page 4 of 4

Sample Description: SL-029-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-029-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419516
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/27/2011 09:00

Suite 210

Reported: 10/18/2011 12:23

Chantilly VA 20151

SD029 SDG#: DX142-18

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 16:11	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

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

Sample Description: SL-030-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-030-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419517
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:25

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD030 SDG#: DX142-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	2.2	0.50	0.50	1

Sample Description: SL-030-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-030-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419517
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:25

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD030 SDG#: DX142-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0439 U	0.0439	1.01	1
11031	12378-PeCDD	40321-76-4	0.0762 JQ	0.0383	5.05	1
11031	123478-HxCDD	39227-28-6	0.0932 JQ	0.0536	5.05	1
11031	123678-HxCDD	57653-85-7	0.133 JBQ	0.0507	5.05	1
11031	123789-HxCDD	19408-74-3	0.145 JBQ	0.0478	5.05	1
11031	1234678-HpCDD	35822-46-9	3.49 JB	0.0870	5.05	1
11031	OCDD	3268-87-9	28.5 B	0.132	10.1	1
11031	2378-TCDF	51207-31-9	0.0640 JQ	0.0555	1.01	1
11031	12378-PeCDF	57117-41-6	0.0580 JBQ	0.0298	5.05	1
11031	23478-PeCDF	57117-31-4	0.0297 U	0.0297	5.05	1
11031	123478-HxCDF	70648-26-9	0.112 JQ	0.0362	5.05	1
11031	123678-HxCDF	57117-44-9	0.111 JQ	0.0319	5.05	1
11031	123789-HxCDF	72918-21-9	0.0578 J	0.0415	5.05	1
11031	234678-HxCDF	60851-34-5	0.109 JBQ	0.0332	5.05	1
11031	1234678-HpCDF	67562-39-4	0.797 JB	0.0429	5.05	1
11031	1234789-HpCDF	55673-89-7	0.0979 JBQ	0.0742	5.05	1
11031	OCDF	39001-02-0	1.79 JB	0.146	10.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	89	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	92	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	86	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	43	17 - 157

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-030-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-030-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419517
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 12:23

Suite 210

Chantilly VA 20151

SD030 SDG#: DX142-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

Sample Description: SL-030-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-030-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419517
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/27/2011 09:00

Suite 210

Reported: 10/18/2011 12:23

Chantilly VA 20151

SD030 SDG#: DX142-19

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 17:07	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-031-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-031-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419518
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD031 SDG#: DX142-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
11625	Moisture Content by 160.3	n.a.	3.4	0.50	0.50	1

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

Sample Description: SL-031-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-031-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419518
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD031 SDG#: DX142-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0792 JQ	0.0384	1.04	1
11031	12378-PeCDD	40321-76-4	0.183 JQ	0.0396	5.18	1
11031	123478-HxCDD	39227-28-6	0.173 J	0.0464	5.18	1
11031	123678-HxCDD	57653-85-7	0.504 JBQ	0.0472	5.18	1
11031	123789-HxCDD	19408-74-3	0.479 JBQ	0.0524	5.18	1
11031	1234678-HpCDD	35822-46-9	8.56 B	0.0522	5.18	1
11031	OCDD	3268-87-9	77.9 B	0.0891	10.4	1
11031	2378-TCDF	51207-31-9	0.674 J	0.0808	1.04	1
11031	12378-PeCDF	57117-41-6	0.294 JB	0.0436	5.18	1
11031	23478-PeCDF	57117-31-4	0.239 JBQ	0.0448	5.18	1
11031	123478-HxCDF	70648-26-9	0.162 JQ	0.0391	5.18	1
11031	123678-HxCDF	57117-44-9	0.170 J	0.0319	5.18	1
11031	123789-HxCDF	72918-21-9	0.0449 U	0.0449	5.18	1
11031	234678-HxCDF	60851-34-5	0.176 JBQ	0.0344	5.18	1
11031	1234678-HpCDF	67562-39-4	1.42 JB	0.0237	5.18	1
11031	1234789-HpCDF	55673-89-7	0.145 JB	0.0440	5.18	1
11031	OCDF	39001-02-0	3.07 JB	0.0836	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	60	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	43	17 - 157

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-031-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-031-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419518
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD031 SDG#: DX142-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					



Analysis Report

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Page 4 of 4

Sample Description: SL-031-SA5DS-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-031-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419518
LLI Group # 1268380
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:50

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

Submitted: 09/27/2011 09:00

Reported: 10/18/2011 12:23

SD031 SDG#: DX142-20*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11278001	10/08/2011 18:04	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11278001	10/05/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11273162401B	09/30/2011 23:10	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/18/11 at 12:23 PM

Group Number: 1268380

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

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

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11273162401B Moisture Content by 160.3	Sample number(s): 6419507-6419518				100		80-120		

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11278001	Sample number(s): 6419507-6419512, 6419514-6419518								
2378-TCDD	0.0414 U	0.0414	1.00	ng/kg	103		67-158		
12378-PeCDD	0.0292 U	0.0292	5.00	ng/kg	101		70-142		
123478-HxCDD	0.0220 U	0.0220	5.00	ng/kg	99		70-164		
123678-HxCDD	0.0339 J	0.0218	5.00	ng/kg	97		76-134		
123789-HxCDD	0.0358 J	0.0215	5.00	ng/kg	98		64-162		
1234678-HpCDD	0.161 J	0.0245	5.00	ng/kg	97		70-140		
OCDD	0.328 J	0.0286	10.0	ng/kg	96		78-144		
2378-TCDF	0.0321 U	0.0321	1.00	ng/kg	102		75-158		
2378-TCDF-Conf	0.0143 J	0.0122	1.00	ng/kg	102		75-158		
12378-PeCDF	0.0235 J	0.0149	5.00	ng/kg	97		80-134		
23478-PeCDF	0.0573 J	0.0154	5.00	ng/kg	96		68-160		
123478-HxCDF	0.0336 U	0.0336	5.00	ng/kg	94		72-134		
123678-HxCDF	0.0260 U	0.0260	5.00	ng/kg	94		84-130		
123789-HxCDF	0.0215 U	0.0215	5.00	ng/kg	94		78-130		
234678-HxCDF	0.0337 J	0.0154	5.00	ng/kg	96		70-156		
1234678-HpCDF	0.0842 J	0.0124	5.00	ng/kg	92		82-122		
1234789-HpCDF	0.0285 J	0.0178	5.00	ng/kg	95		78-138		
OCDF	0.135 J	0.0560	10.0	ng/kg	95		63-170		

Batch number: 11285001	Sample number(s): 6419513								
2378-TCDD	0.0501 J	0.0485	1.00	ng/kg	95		67-158		
12378-PeCDD	0.0433 J	0.0366	5.00	ng/kg	95		70-142		
123478-HxCDD	0.0242 U	0.0242	5.00	ng/kg	94		70-164		
123678-HxCDD	0.0270 J	0.0240	5.00	ng/kg	90		76-134		
123789-HxCDD	0.0287 J	0.0255	5.00	ng/kg	92		64-162		
1234678-HpCDD	0.227 J	0.0371	5.00	ng/kg	90		70-140		
OCDD	0.456 J	0.0253	10.0	ng/kg	90		78-144		
2378-TCDF	0.0371 U	0.0371	1.00	ng/kg	100		75-158		
12378-PeCDF	0.0611 J	0.0199	5.00	ng/kg	92		80-134		
23478-PeCDF	0.0852 J	0.0206	5.00	ng/kg	89		68-160		
123478-HxCDF	0.0401 J	0.0208	5.00	ng/kg	89		72-134		
123678-HxCDF	0.0225 J	0.0172	5.00	ng/kg	90		84-130		
123789-HxCDF	0.0229 U	0.0229	5.00	ng/kg	90		78-130		
234678-HxCDF	0.0261 J	0.0185	5.00	ng/kg	88		70-156		
1234678-HpCDF	0.0966 J	0.0117	5.00	ng/kg	88		82-122		
1234789-HpCDF	0.0371 J	0.0200	5.00	ng/kg	92		78-138		
OCDF	0.217 J	0.0584	10.0	ng/kg	92		63-170		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/18/11 at 12:23 PM

Group Number: 1268380

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11273162401B Moisture Content by 160.3	Sample number(s): 6419507-6419518 BKG: P419491 0.67 0.62 7 (1) 20								
Batch number: 11278001	Sample number(s): 6419507-6419512, 6419514-6419518 UNSPK: 6419510								
2378-TCDD	99	95	67-158	4	25				
12378-PeCDD	99	97	70-142	2	25				
123478-HxCDD	99	95	70-164	4	25				
123678-HxCDD	96	93	76-134	3	25				
123789-HxCDD	102	99	64-162	2	25				
1234678-HpCDD	94	91	70-140	3	25				
OCDD	99	93	78-144	4	25				
2378-TCDF	95	91	75-158	4	25				
2378-TCDF-Conf	95	91	75-158	4	25				
12378-PeCDF	96	94	80-134	2	25				
23478-PeCDF	94	91	68-160	3	25				
123478-HxCDF	96	89	72-134	8	25				
123678-HxCDF	95	88	84-130	7	25				
123789-HxCDF	94	90	78-130	4	25				
234678-HxCDF	95	91	70-156	4	25				
1234678-HpCDF	89	88	82-122	1	25				
1234789-HpCDF	94	92	78-138	2	25				
OCDF	95	89	63-170	6	25				

Surrogate Quality Control

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

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11278001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6419507	71	59	57	73	61	55
6419508	73	64	64	77	67	68
6419509	71	65	64	71	67	71
6419510	73	64	64	69	64	69
6419511	71	64	35	41	64	67
6419512	73	62	41	51	63	66
6419514	75	64	68	70	74	74
6419515	82	65	29	46	75	73
6419516	71	63	61	71	66	60
6419517	89	76	75	83	79	74
6419518	76	60	60	71	65	60
Blank	72	64	31	40	69	60
MS	71	64	35	41	64	67
MSD	73	62	41	51	63	66
OPR	66	58	49	63	61	53

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/18/11 at 12:23 PM

Group Number: 1268380

Surrogate Quality Control

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
6419507	96	46	44	70	76	79
6419508	95	60	62	72	81	88
6419509	85	63	61	71	76	82
6419510	79	59	58	70	73	78
6419511	60	56	54	70	74	79
6419512	70	56	55	70	77	88
6419514	67	67	52	66	79	80
6419515	39	55	34	66	78	76
6419516	71	49	37	69	75	77
6419517	82	58	43	81	87	90
6419518	80	52	43	69	78	79
Blank	65	55	48	77	85	87
MS	60	56	54	70	74	79
MSD	70	56	55	70	77	88
OPR	88	53	46	71	79	81
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	13C12-2378-TCDF-Conf
6419507	80	79	79	63	73	
6419508	98	87	91	67	73	
6419509	80	80	81	67	70	
6419510	75	80	77	67	70	
6419511	86	80	82	67	71	
6419512	95	84	80	67	68	
6419514	79	72	57	75	64	
6419515	76	59	37		67	74
6419516	68	65	49	67	69	
6419517	92	76	56	86	83	
6419518	68	73	62	72	70	
Blank	88	89	86	61	74	55
MS	86	80	82	67	71	67
MSD	95	84	80	67	68	67
OPR	80	84	82	57	69	57
Limits:	28-130	23-140	17-157	24-169	24-185	24-169
Analysis Name: 10a Dioxin/Furan by EPA 1613B						
Batch number: 11285001						
	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6419513	68	64	51	55	64	68
Blank	73	68	59	72	66	66
OPR	63	58	55	65	60	60
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
6419513	62	70	65	67	70	72
Blank	93	64	68	79	81	85

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/18/11 at 12:23 PM

Group Number: 1268380

Surrogate Quality Control

OPR	89	58	61	69	73	78
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	13C12-2378-TCDF-Conf
6419513	72	75	72	66	63	
Blank	83	92	96	64	76	
OPR	76	83	88	54	65	54
Limits:	28-130	23-140	17-157	24-169	24-185	22-152

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

13013/12 GS 380 / 6419507-18

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS										SS ONLY		Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.						*Metals EPA 601/602/20B&747.1A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	VOCs EPA 8260B \$	
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers													
SL-001-SA3-SS-0.0-0.5	9/26/11	0750	SOIL	NONE	1-SS Sleeve			X	X									
SL-001-SA3-SS-0.0-0.5	9/26/11	0750	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
SL-002-SA3-SS-0.0-0.5	9/26/11	0815	SOIL	NONE	1-SS Sleeve			X	X									
SL-002-SA3-SS-0.0-0.5	9/26/11	0815	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
SL-002-SA5DS-SS-0.0-0.5	9/26/11	1435	SOIL	NONE	1-SS Sleeve			X	X									
SL-002-SA5DS-SS-0.0-0.5	9/26/11	1435	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
SL-001-SA5D-SS-0.0-0.5MS	9/26/11	1505	SOIL	NONE	2-SS Sleeves			X	X									
SL-001-SA5D-SS-0.0-0.5MS	9/26/11	1505	SOIL	NONE	2-16 oz. jars	X	X			X	X	X	X	X	X			
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	2-Encores											X		
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	1-SS Sleeve			X	X									
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
SL-027-SA5DS-SS-0.0-0.5	9/26/11	0925	SOIL	NONE	1-SS Sleeve			X	X									
SL-027-SA5DS-SS-0.0-0.5	9/26/11	0925	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
SL-028-SA5DS-SS-0.0-0.5	9/26/11	1050	SOIL	NONE	1-SS Sleeve			X	X									
SL-028-SA5DS-SS-0.0-0.5	9/26/11	1050	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
SL-029-SA5DS-SS-0.0-0.5	9/26/11	1110	SOIL	NONE	1-SS Sleeve			X	X									
SL-029-SA5DS-SS-0.0-0.5	9/26/11	1110	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
SL-030-SA5DS-SS-0.0-0.5	9/26/11	1125	SOIL	NONE	1-SS Sleeve			X	X									
SL-030-SA5DS-SS-0.0-0.5	9/26/11	1125	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
SL-031-SA5DS-SS-0.0-0.5	9/26/11	1150	SOIL	NONE	1-SS Sleeve			X	X									
SL-031-SA5DS-SS-0.0-0.5	9/26/11	1150	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
SL-032-SA5DS-SS-0.0-0.5	9/26/11	1210	SOIL	NONE	1-SS Sleeve			X	X									
SL-032-SA5DS-SS-0.0-0.5	9/26/11	1210	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
DUP01-SA5DS-QC-092611	9/26/11	1510	SOIL	NONE	1-SS Sleeve			X	X									
DUP01-SA5DS-QC-092611	9/26/11	1510	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X	X	X			
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)												Laboratory:		
		09/26/2011 / 1630														Lancaster Laboratories, Inc.		
Received by: (Signature)		Date/Time		Airbill No.(s)														
				8767 9858 3428; 8767 9858 3439 8767 9858 3440														

SL-001-SA3-SS
MS/MSD sample
9/26/11

Revised
COC

Nicole Maljovec

From: Bloisa, Peggy [BloisaMJ@cdm.com]
Sent: Tuesday, September 27, 2011 7:33 PM
To: Nicole Maljovec; SA Env Entry
Cc: Burgesser, Todd; Zakowski, Cherie; Laura Rainey; Hartman, Pamela
Subject: SSFL COCs for 9/26 and 9/27
Attachments: COC_09_27_11.xlsx; COC_09_26_11 revised.xlsx

Attached is today's COC and a revised COC for yesterday 9/26. The sample shown as SL-021-002-SA5DS-SS-0.0-0.5 collected at 1505 as shown on yesterdays COC should have been labeled as SL-001. The "real" SL-021 was sampled today.

Peggy

Peggy Bloisa, P.G.

CDM

| 100 Pringle Avenue Suite 300 | Walnut Creek, CA 94596 |

| Phone and Fax: (925) 296-8053 |



Please consider the environment before printing this email.

9/30/2011

13013 1268380 6419507-18

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS								SS ONLY		Other Instructions and Notes	
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.							*Metals EPA 6010/6020/BA7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	*Pesticides EPA 8061A (surface soil only)		*Herbicides EPA 8151 (surface soil only)
Samplers Signatures: <i>Vital Ctr</i>																		
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers													
SL-001-SA3-SS-0.0-0.5	9/26/11	0750	SOIL	NONE	1-SS Sleeve				X	X								
SL-001-SA3-SS-0.0-0.5	9/26/11	0750	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
SL-002-SA3-SS-0.0-0.5	9/26/11	0815	SOIL	NONE	1-SS Sleeve			X	X									
SL-002-SA3-SS-0.0-0.5	9/26/11	0815	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
SL-002-SA5DS-SS-0.0-0.5	9/26/11	1435	SOIL	NONE	1-SS Sleeve			X	X									
SL-002-SA5DS-SS-0.0-0.5	9/26/11	1435	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
SL-021-SA5D-SS-0.0-0.5MS	9/26/11	1505	SOIL	NONE	2-SS Sleeves			X	X									MS/MSD sample
SL-021-SA5D-SS-0.0-0.5MS	9/26/11	1505	SOIL	NONE	2-16 oz Jars	X	X				X	X	X	X		X	X	MS/MSD sample
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	2-Encores												X	
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	1-SS Sleeve			X	X									
SL-026-SA5DS-SS-0.0-0.5	9/26/11	1035	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
SL-027-SA5DS-SS-0.0-0.5	9/26/11	0925	SOIL	NONE	1-SS Sleeve			X	X									
SL-027-SA5DS-SS-0.0-0.5	9/26/11	0925	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
SL-028-SA5DS-SS-0.0-0.5	9/26/11	1050	SOIL	NONE	1-SS Sleeve			X	X									
SL-028-SA5DS-SS-0.0-0.5	9/26/11	1050	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
SL-029-SA5DS-SS-0.0-0.5	9/26/11	1110	SOIL	NONE	1-SS Sleeve			X	X									
SL-029-SA5DS-SS-0.0-0.5	9/26/11	1110	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
SL-030-SA5DS-SS-0.0-0.5	9/26/11	1125	SOIL	NONE	1-SS Sleeve			X	X									
SL-030-SA5DS-SS-0.0-0.5	9/26/11	1125	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
SL-031-SA5DS-SS-0.0-0.5	9/26/11	1150	SOIL	NONE	1-SS Sleeve			X	X									
SL-031-SA5DS-SS-0.0-0.5	9/26/11	1150	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
SL-032-SA5DS-SS-0.0-0.5	9/26/11	1210	SOIL	NONE	1-SS Sleeve			X	X									
SL-032-SA5DS-SS-0.0-0.5	9/26/11	1210	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
DUP01-SA5DS-QC-092611	9/26/11	1510	SOIL	NONE	1-SS Sleeve			X	X									
DUP01-SA5DS-QC-092611	9/26/11	1510	SOIL	NONE	1-16 oz Jar	X	X				X	X	X	X		X	X	
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)						Laboratory:								
<i>Vital Ctr</i>		09/26/2011 / 1630		<i>Harry H. L. 9/27/11 0900</i>						Lancaster Laboratories, Inc.								
Received by: (Signature)		Date/Time		Air Mail No(s)														
				8767 9858 3428; 8767 9858 3439 8767 9858 3440														

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

October 28, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/12/2011

Group Number: 1270785

SDG: DE266

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-265-SA6-SB-4.0-5.0 Soil	6434468
SL-147-SA7-SB-1.0-2.0 Soil	6434469
SL-155-SA7-SB-1.5-2.5 Soil	6434470
SL-009-SA3-SB-4.0-5.0 Soil	6434471
SL-049-SA7-SB-4.0-5.0 Soil	6434472
SL-162-SA7-SB-0.0-1.0 Soil	6434473
SL-166-SA7-SB-1.0-2.0 Soil	6434474
SL-167-SA7-SB-0.5-1.5 Soil	6434475
SL-168-SA7-SB-0.5-1.5 Soil	6434476
EB-SA7-SB-101111 Water	6434477
TB-101111 Water	6434478
TB-101111 Sand	6434479
TB-101111 Water	6434480

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

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

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

Respectfully Submitted,



Chad A. Moline
Group Leader

Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434468
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6601 SDG#: DE266-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	180 U	180	361		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	72	U 72	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	360	U 360	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	72	U 72	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1

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

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

Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434468
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6601 SDG#: DE266-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	Tetralin	119-64-2	180	U 180	180		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U 0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U 0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U 0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U 6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U 6.6	20		1
10138	Chrysene	218-01-9	0.72	J 0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U 6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U 6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.7	J 6.6	20		1
10138	Fluoranthene	206-44-0	0.73	U 0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U 0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U 0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U 0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U 0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U 0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6	U 6.6	20		1
10138	Phenanthrene	85-01-8	0.73	U 0.73	1.8		1
10138	Pyrene	129-00-0	0.73	U 0.73	1.8		1
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U 0.2	0.9		21.11

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

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



Analysis Report

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

Page 3 of 7

Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434468
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6601 SDG#: DE266-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*		Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg		ug/kg		ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	64	U	64		130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	43	U	43		130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	86	U	86		260	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	86	U	86		260	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	43	U	43		130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	43	U	43		130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	43	U	43		130	1000000 0	1
10132	HMX	2691-41-0	110	U	110		320	1000000 0	1
10132	Nitrobenzene	98-95-3	43	U	43		130	1000000 0	1
10132	Nitroglycerin	55-63-0	860	U	860		2,600	1000000 0	1
10132	2-Nitrotoluene	88-72-2	86	U	86		130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110	U	110		130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	86	U	86		130	1000000 0	1
10132	PETN	78-11-5	860	U	860		2,600	1000000 0	1
10132	RDX	121-82-4	54	U	54		130	1000000 0	1
10132	Tetryl	479-45-8	66	U	66		130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	43	U	43		130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	43	U	43		130	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg		ug/kg		ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	660	U	660		1,600		1
Pesticides/PCBs		SW-846 8082	ug/kg		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1		3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1		3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1		3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36		1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36		1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36		1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36		1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36		1.9		1

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Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434468
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6601 SDG#: DE266-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.89 J	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43 U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	550		1
10501	Isopropanol	67-63-0	110 U	110	550		1
10501	Methanol	67-56-1	110 U	110	550		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.5 U	5.5	11		1
08283	Ethylene glycol	107-21-1	5.5 J	5.5	11		1
08283	Propylene glycol	57-55-6	5.5 U	5.5	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.8		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	4.0	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	7.8	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44 U	0.44	1.3		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,100	6.48	21.4		1
07914	Boron	7440-42-8	0.386 U	0.386	5.36		1
01650	Calcium	7440-70-2	2,220	2.68	21.4		1
01654	Iron	7439-89-6	20,900	2.80	21.4		1
01656	Lithium	7439-93-2	23.0	0.66	2.1		1
01657	Magnesium	7439-95-4	4,150	0.471	10.7		1
06958	Manganese	7439-96-5	269	0.0386	0.536		1
10145	Phosphorus	7723-14-0	207	0.375	10.7		1
01662	Potassium	7440-09-7	2,260	12.1	53.6		1
01667	Sodium	7440-23-5	118	6.38	107		1
07968	Strontium	7440-24-6	22.3	0.0268	0.536		1
06969	Tin	7440-31-5	3.02 J	0.343	10.7		1
06970	Titanium	7440-32-6	1,230	0.0761	1.07		1
10146	Zirconium	7440-67-7	2.90 J	0.493	5.36		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	

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Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434468
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6601 SDG#: DE266-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.182 J	0.0793	0.214		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.19	0.0857	0.429		2
06126	Barium	7440-39-3	120	0.114	0.429		2
06127	Beryllium	7440-41-7	0.781	0.0171	0.107		2
06128	Cadmium	7440-43-9	0.103 J	0.0471	0.107		2
06131	Chromium	7440-47-3	23.4	0.129	0.429		2
06132	Cobalt	7440-48-4	5.62	0.0214	0.107		2
06133	Copper	7440-50-8	8.96	0.0857	0.429		2
06135	Lead	7439-92-1	6.04	0.0109	0.214		2
06138	Molybdenum	7439-98-7	0.500	0.0536	0.107		2
06139	Nickel	7440-02-0	14.8	0.107	0.429		2
06141	Selenium	7782-49-2	0.0999 J	0.0621	0.429		2
06142	Silver	7440-22-4	0.0402 J	0.0152	0.107		2
06145	Thallium	7440-28-0	0.288	0.0321	0.107		2
06148	Vanadium	7440-62-2	45.4	0.0236	0.107		2
06149	Zinc	7440-66-6	57.0	0.600	3.21		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0072 U	0.0072	0.103		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7	0.87	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.9	0.87	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.8		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.54		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.84	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	8.5	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434468
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6601 SDG#: DE266-01

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-265-SA6-SB-4.5.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11285SLG026	10/17/2011 22:04	Matthew S Woods	10
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 10:11	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 02:44	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11285SLG026	10/13/2011 06:25	Roman Kuropatkin	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16A	10/18/2011 00:31	Laura M Krieger	21.11
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128525828	10/12/2011 14:15	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128525828	10/12/2011 14:15	Larry E Bevins	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 11:41	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112860003A	10/14/2011 18:28	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112860020A	10/19/2011 17:56	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112860020A	10/14/2011 06:45	Katheryne V Sponheimer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112860003A	10/13/2011 13:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112850037A	10/13/2011 19:11	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112870018A	10/18/2011 01:08	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/22/2011 01:40	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112860009A	10/15/2011 00:49	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112860009A	10/13/2011 14:00	David S Schrum	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112850037A	10/13/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112870018A	10/14/2011 17:15	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112855708001	10/21/2011 04:27	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112855708001	10/20/2011 02:07	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112855708001	10/21/2011 04:27	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112855708001	10/21/2011 04:27	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112855708001	10/20/2011 02:07	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112855708001	10/21/2011 04:27	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112855708001	10/20/2011 02:07	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112855708001	10/20/2011 02:07	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112855708001	10/21/2011 04:27	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112855708001	10/20/2011 02:07	Tara L Snyder	1

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Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434468
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Reported: 10/28/2011 13:28

E6601 SDG#: DE266-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	112855708001	10/20/2011 02:07	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112855708001	10/21/2011 04:27	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112855708001	10/20/2011 02:07	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112855708001	10/20/2011 02:07	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112851026001D	10/13/2011 08:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112851026001C	10/13/2011 08:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112851026001B	10/13/2011 08:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112851026001A	10/13/2011 08:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112855711001	10/13/2011 08:56	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112855708001	10/12/2011 22:12	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112851026001	10/12/2011 22:14	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112855711001	10/13/2011 01:15	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201A	10/25/2011 20:58	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11297495201A	10/25/2011 20:58	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202A	10/20/2011 01:35	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 12:14	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11290102201A	10/17/2011 20:32	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201A	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202A	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11290102201A	10/17/2011 16:45	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11294039401A	10/21/2011 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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Sample Description: SL-147-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434469
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6602 SDG#: DE266-02

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

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Sample Description: SL-147-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434469
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6602 SDG#: DE266-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Tetralin	119-64-2	180	U 180	180		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.71	U 0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.71	U 0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U 0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U 0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U 0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4	U 6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4	U 6.4	19		1
10138	Chrysene	218-01-9	0.36	U 0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U 0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J 6.4	19		1
10138	Fluoranthene	206-44-0	0.71	U 0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U 0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U 0.71	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.71	U 0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71	U 0.71	1.8		1
10138	Naphthalene	91-20-3	0.79	J 0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U 0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U 6.4	19		1
10138	Phenanthrene	85-01-8	0.71	U 0.71	1.8		1
10138	Pyrene	129-00-0	0.71	U 0.71	1.8		1
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U 0.2	1		23.32
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U 1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1	U 1.1	3.5		1
10225	Aroclor 5460	11126-42-4	1.1	U 1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35	U 0.35	1.8		1

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Sample Description: SL-147-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434469
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6602 SDG#: DE266-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1221	11104-28-2	0.35 U	0.35	1.8		1
10225	PCB-1232	11141-16-5	0.35 U	0.35	1.8		1
10225	PCB-1242	53469-21-9	0.35 U	0.35	1.8		1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8		1
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8		1
10225	PCB-1260	11096-82-5	0.41 U	0.41	1.8		1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	530		1
10501	Isopropanol	67-63-0	110 U	110	530		1
10501	Methanol	67-56-1	110 U	110	530		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.3 U	5.3	11		1
08283	Ethylene glycol	107-21-1	5.3 U	5.3	11		1
08283	Propylene glycol	57-55-6	5.3 U	5.3	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.7		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.7		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.7		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.43 U	0.43	1.3		1
10199	EFH (C15-C20)	n.a.	0.43 U	0.43	1.3		1
10199	EFH (C21-C30)	n.a.	0.43 U	0.43	1.3		1
10199	EFH (C30 - C40)	n.a.	0.43 U	0.43	1.3		1
10199	EFH (C8-C11)	n.a.	0.43 U	0.43	1.3		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,500	6.27	20.7		1
07914	Boron	7440-42-8	0.373 U	0.373	5.18		1
01650	Calcium	7440-70-2	2,330	2.59	20.7		1
01654	Iron	7439-89-6	18,500	2.70	20.7		1
01656	Lithium	7439-93-2	15.0	0.64	2.1		1
01657	Magnesium	7439-95-4	4,380	0.456	10.4		1
06958	Manganese	7439-96-5	237	0.0373	0.518		1
10145	Phosphorus	7723-14-0	303	0.363	10.4		1
01662	Potassium	7440-09-7	2,180	11.7	51.8		1
01667	Sodium	7440-23-5	69.6 J	6.17	104		1
07968	Strontium	7440-24-6	11.1	0.0259	0.518		1
06969	Tin	7440-31-5	2.81 J	0.332	10.4		1

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Sample Description: SL-147-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434469
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6602 SDG#: DE266-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
06970	Titanium	7440-32-6	1,140	0.0736	1.04		1
10146	Zirconium	7440-67-7	1.56 J	0.477	5.18		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.152 J	0.0759	0.205		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.03	0.0821	0.410		2
06126	Barium	7440-39-3	62.0	0.109	0.410		2
06127	Beryllium	7440-41-7	0.455	0.0164	0.103		2
06128	Cadmium	7440-43-9	0.0452 U	0.0452	0.103		2
06131	Chromium	7440-47-3	13.9	0.123	0.410		2
06132	Cobalt	7440-48-4	5.87	0.0205	0.103		2
06133	Copper	7440-50-8	5.78	0.0821	0.410		2
06135	Lead	7439-92-1	4.26	0.0105	0.205		2
06138	Molybdenum	7439-98-7	0.286	0.0513	0.103		2
06139	Nickel	7440-02-0	7.57	0.103	0.410		2
06141	Selenium	7782-49-2	0.185 J	0.0595	0.410		2
06142	Silver	7440-22-4	0.0146 U	0.0146	0.103		2
06145	Thallium	7440-28-0	0.278	0.0308	0.103		2
06148	Vanadium	7440-62-2	31.7	0.0226	0.103		2
06149	Zinc	7440-66-6	53.7	0.575	3.08		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0073 U	0.0073	0.103		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0	0.85	1.1		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.0		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.52		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	5.40	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	6.3	0.50	0.50		1

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SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434469
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E6602 SDG#: DE266-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	%	
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-147-SA7-SB-1.5.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 10:36	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 03:17	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16A	10/18/2011 01:08	Laura M Krieger	23.32
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128525828	10/12/2011 14:20	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128525828	10/12/2011 14:20	Larry E Bevins	n.a.
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112860020A	10/19/2011 18:15	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112860020A	10/14/2011 06:45	Katheryne V Sponheimer	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112850037A	10/13/2011 19:27	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112870018A	10/18/2011 01:21	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/21/2011 23:05	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112860009A	10/14/2011 22:01	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112860009A	10/13/2011 14:00	David S Schrum	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112850037A	10/13/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112870018A	10/14/2011 17:15	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112855708001	10/21/2011 04:31	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112855708001	10/20/2011 02:11	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112855708001	10/21/2011 04:31	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112855708001	10/21/2011 04:31	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112855708001	10/20/2011 02:11	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112855708001	10/21/2011 04:31	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112855708001	10/20/2011 02:11	Tara L Snyder	1

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

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

Sample Description: SL-147-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434469
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6602 SDG#: DE266-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01645	Phosphorus	SW-846 6010B	1	112855708001	10/20/2011 02:11	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112855708001	10/21/2011 04:31	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112855708001	10/20/2011 02:11	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112855708001	10/20/2011 02:11	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112855708001	10/21/2011 04:31	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112855708001	10/20/2011 02:11	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112855708001	10/20/2011 02:11	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112851026001D	10/13/2011 08:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112851026001C	10/13/2011 08:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112851026001B	10/13/2011 08:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112851026001A	10/13/2011 08:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112855711001	10/13/2011 08:59	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112855708001	10/12/2011 22:12	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112851026001	10/12/2011 22:14	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112855711001	10/13/2011 01:15	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201A	10/25/2011 21:14	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202A	10/20/2011 02:44	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 12:40	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11290102201A	10/17/2011 20:33	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201A	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202A	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11290102201A	10/17/2011 16:45	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11294039401A	10/21/2011 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11291162401B	10/18/2011 21:20	Scott W Freisher	1

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

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

Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434470
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6603 SDG#: DE266-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	22.2 J	17.2	34.4		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	170	U 170	520		1
04688	Benzyl alcohol	100-51-6	170	U 170	520		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170		1
04688	4-Chloroaniline	106-47-8	69	U 69	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520		1
04688	2,4-Dinitrophenol	51-28-5	350	U 350	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	35	U 35	170		1
04688	4-Methylphenol	106-44-5	35	U 35	170		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	35	U 35	170		1
04688	4-Nitroaniline	100-01-6	69	U 69	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	520		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1

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

Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434470
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6603 SDG#: DE266-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U 170	520		1
04688	Phenol	108-95-2	17	U 17	170		1
04688	Tetralin	119-64-2	170	U 170	170		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	170		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	170		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69	U 0.69	1.7		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.7		1
10138	Anthracene	120-12-7	0.35	U 0.35	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.69	U 0.69	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.69	U 0.69	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	0.69	U 0.69	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	0.69	U 0.69	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	0.69	U 0.69	1.7		1
10138	Butylbenzylphthalate	85-68-7	6.3	U 6.3	19		1
10138	Di-n-butylphthalate	84-74-2	6.3	U 6.3	19		1
10138	Chrysene	218-01-9	0.35	U 0.35	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U 0.69	1.7		1
10138	Diethylphthalate	84-66-2	6.3	U 6.3	19		1
10138	Dimethylphthalate	131-11-3	6.3	U 6.3	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	15	J 6.3	19		1
10138	Fluoranthene	206-44-0	0.69	U 0.69	1.7		1
10138	Fluorene	86-73-7	0.69	U 0.69	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.69	U 0.69	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.69	U 0.69	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.69	U 0.69	1.7		1
10138	Naphthalene	91-20-3	0.69	U 0.69	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U 0.69	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.3	U 6.3	19		1
10138	Phenanthrene	85-01-8	0.69	U 0.69	1.7		1
10138	Pyrene	129-00-0	0.69	U 0.69	1.7		1
GC Volatiles	TPH GRO	SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
	mod						
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U 0.2	1.1		26.65

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

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

Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434470
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6603 SDG#: DE266-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	59 U	59	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	39 U	39	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	79 U	79	240	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	79 U	79	240	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	39 U	39	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	39 U	39	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	39 U	39	120	1000000 0	1
10132	HMX	2691-41-0	98 U	98	290	1000000 0	1
10132	Nitrobenzene	98-95-3	39 U	39	120	1000000 0	1
10132	Nitroglycerin	55-63-0	790 U	790	2,400	1000000 0	1
10132	2-Nitrotoluene	88-72-2	79 U	79	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	98 U	98	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	79 U	79	120	1000000 0	1
10132	PETN	78-11-5	790 U	790	2,400	1000000 0	1
10132	RDX	121-82-4	49 U	49	120	1000000 0	1
10132	Tetryl	479-45-8	60 U	60	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	39 U	39	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	39 U	39	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	630 U	630	1,600		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4		1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4		1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4		1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8		1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.8		1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.8		1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.8		1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8		1

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

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

Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434470
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6603 SDG#: DE266-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.8		1
10225	PCB-1260	11096-82-5	0.40 U	0.40	1.8		1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	520		1
10501	Isopropanol	67-63-0	100 U	100	520		1
10501	Methanol	67-56-1	100 U	100	520		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.2 U	5.2	10		1
08283	Ethylene glycol	107-21-1	5.2 U	5.2	10		1
08283	Propylene glycol	57-55-6	5.2 U	5.2	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.6		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.6		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.6		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.42 U	0.42	1.3		1
10199	EFH (C15-C20)	n.a.	0.42 U	0.42	1.3		1
10199	EFH (C21-C30)	n.a.	0.42 U	0.42	1.3		1
10199	EFH (C30 - C40)	n.a.	1.0 J	0.42	1.3		1
10199	EFH (C8-C11)	n.a.	0.42 U	0.42	1.3		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,500	6.06	20.0		1
07914	Boron	7440-42-8	0.361 U	0.361	5.01		1
01650	Calcium	7440-70-2	2,890	2.50	20.0		1
01654	Iron	7439-89-6	23,200	2.61	20.0		1
01656	Lithium	7439-93-2	24.7	0.62	2.0		1
01657	Magnesium	7439-95-4	6,010	0.441	10.0		1
06958	Manganese	7439-96-5	429	0.0361	0.501		1
10145	Phosphorus	7723-14-0	426	0.351	10.0		1
01662	Potassium	7440-09-7	3,360	11.3	50.1		1
01667	Sodium	7440-23-5	82.9 J	5.96	100		1
07968	Strontium	7440-24-6	14.5	0.0250	0.501		1
06969	Tin	7440-31-5	2.87 J	0.321	10.0		1
06970	Titanium	7440-32-6	1,330	0.0711	1.00		1
10146	Zirconium	7440-67-7	1.85 J	0.461	5.01		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	

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

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

Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434470
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6603 SDG#: DE266-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.146 J	0.0741	0.200		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.28	0.0801	0.401		2
06126	Barium	7440-39-3	123	0.106	0.401		2
06127	Beryllium	7440-41-7	0.655	0.0160	0.100		2
06128	Cadmium	7440-43-9	0.123	0.0441	0.100		2
06131	Chromium	7440-47-3	27.8	0.120	0.401		2
06132	Cobalt	7440-48-4	9.38	0.0200	0.100		2
06133	Copper	7440-50-8	10.7	0.0801	0.401		2
06135	Lead	7439-92-1	5.45	0.0102	0.200		2
06138	Molybdenum	7439-98-7	0.728	0.0501	0.100		2
06139	Nickel	7440-02-0	19.8	0.100	0.401		2
06141	Selenium	7782-49-2	0.216 J	0.0581	0.401		2
06142	Silver	7440-22-4	0.0252 J	0.0142	0.100		2
06145	Thallium	7440-28-0	0.340	0.0300	0.100		2
06148	Vanadium	7440-62-2	49.3	0.0220	0.100		2
06149	Zinc	7440-66-6	67.3	0.561	3.00		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0073 J	0.0070	0.0992		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2	0.85	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.3 J	0.85	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.3		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 J	0.21	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.18 U	0.18	0.49		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.88	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	4.0	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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

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

Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434470
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6603 SDG#: DE266-03

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-155-SA7-SB-2.0.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11285SLG026	10/17/2011 22:24	Matthew S Woods	1
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 11:01	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 03:50	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11285SLG026	10/13/2011 06:25	Roman Kuropatkin	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16A	10/18/2011 01:46	Laura M Krieger	26.65
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128525828	10/12/2011 14:21	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128525828	10/12/2011 14:22	Larry E Bevins	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 12:24	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112860003A	10/14/2011 18:37	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112860020A	10/19/2011 18:33	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112860020A	10/14/2011 06:45	Katheryne V Sponheimer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112860003A	10/13/2011 13:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112850037A	10/13/2011 19:44	Elizabeth J Marin	1
08283	19a Glycols by 8015B modified	SW-846 8015B modified	1	112870018A	10/18/2011 01:34	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/22/2011 00:33	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112860009A	10/14/2011 22:26	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112860009A	10/13/2011 14:00	David S Schrum	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112850037A	10/13/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112870018A	10/14/2011 17:15	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112855708001	10/21/2011 04:35	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112855708001	10/20/2011 02:15	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112855708001	10/21/2011 04:35	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112855708001	10/21/2011 04:35	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112855708001	10/20/2011 02:15	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112855708001	10/21/2011 04:35	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112855708001	10/20/2011 02:15	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112855708001	10/20/2011 02:15	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112855708001	10/21/2011 04:35	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112855708001	10/20/2011 02:15	Tara L Snyder	1

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

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

Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434470
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6603 SDG#: DE266-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	112855708001	10/20/2011 02:15	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112855708001	10/21/2011 04:35	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112855708001	10/20/2011 02:15	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112855708001	10/20/2011 02:15	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112851026001D	10/13/2011 08:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112851026001C	10/13/2011 08:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112851026001B	10/13/2011 08:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112851026001A	10/13/2011 08:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112855711001	10/13/2011 09:01	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112855708001	10/12/2011 22:12	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112851026001	10/12/2011 22:14	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112855711001	10/13/2011 01:15	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201A	10/25/2011 21:29	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11297495201A	10/25/2011 21:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202A	10/20/2011 03:30	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 12:54	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11290102201A	10/17/2011 20:34	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201A	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202A	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11290102201A	10/17/2011 16:45	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11294039401A	10/21/2011 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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

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

Sample Description: SL-009-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434471
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6604 SDG#: DE266-04

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

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

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

Sample Description: SL-009-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434471
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6604 SDG#: DE266-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 4,6-dinitro-2-methylphenol							
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74 U	0.74	1.8		1
10138	Acenaphthylene	208-96-8	0.37 U	0.37	1.8		1
10138	Anthracene	120-12-7	0.37 U	0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.74 U	0.74	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.74 U	0.74	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.74 U	0.74	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.74 U	0.74	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.74 U	0.74	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6 U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6 U	6.6	20		1
10138	Chrysene	218-01-9	0.37 U	0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.74 U	0.74	1.8		1
10138	Diethylphthalate	84-66-2	6.6 U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6 U	6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.0 J	6.6	20		1
10138	Fluoranthene	206-44-0	0.74 U	0.74	1.8		1
10138	Fluorene	86-73-7	0.74 U	0.74	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74 U	0.74	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.74 U	0.74	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.74 U	0.74	1.8		1
10138	Naphthalene	91-20-3	0.74 U	0.74	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.74 U	0.74	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6 U	6.6	20		1
10138	Phenanthrene	85-01-8	0.74 U	0.74	1.8		1
10138	Pyrene	129-00-0	0.74 U	0.74	1.8		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	5.5 U	5.5	18		5
10225	Aroclor 5442	12642-23-8	5.5 U	5.5	18		5
10225	Aroclor 5460	11126-42-4	47	5.5	18		5
10225	PCB-1016	12674-11-2	1.8 U	1.8	9.4		5
10225	PCB-1221	11104-28-2	1.8 U	1.8	9.4		5
10225	PCB-1232	11141-16-5	1.8 U	1.8	9.4		5
10225	PCB-1242	53469-21-9	1.8 U	1.8	9.4		5
10225	PCB-1248	12672-29-6	1.8 U	1.8	9.4		5
10225	PCB-1254	11097-69-1	96	1.8	9.4		5
10225	PCB-1260	11096-82-5	55	2.1	9.4		5
10225	PCB-1262	37324-23-5	1.8 U	1.8	9.4		5
10225	PCB-1268	11100-14-4	1.8 U	1.8	9.4		5

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

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

Sample Description: SL-009-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434471
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6604 SDG#: DE266-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals			mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,800	6.49	21.5		1
07914	Boron	7440-42-8	0.386 U	0.386	5.36		1
01650	Calcium	7440-70-2	3,350	2.68	21.5		1
01654	Iron	7439-89-6	19,800	2.80	21.5		1
01656	Lithium	7439-93-2	24.7	0.67	2.1		1
01657	Magnesium	7439-95-4	4,330	0.472	10.7		1
06958	Manganese	7439-96-5	333	0.0386	0.536		1
10145	Phosphorus	7723-14-0	264	0.375	10.7		1
01662	Potassium	7440-09-7	2,920	12.1	53.6		1
01667	Sodium	7440-23-5	1,530	6.38	107		1
07968	Strontium	7440-24-6	19.8	0.0268	0.536		1
06969	Tin	7440-31-5	4.24 J	0.343	10.7		1
06970	Titanium	7440-32-6	1,070	0.0762	1.07		1
10146	Zirconium	7440-67-7	1.82 J	0.493	5.36		1
SW-846 6010B			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.298	0.0794	0.215		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.87	0.0858	0.429		2
06126	Barium	7440-39-3	98.4	0.114	0.429		2
06127	Beryllium	7440-41-7	0.913	0.0172	0.107		2
06128	Cadmium	7440-43-9	0.673	0.0472	0.107		2
06131	Chromium	7440-47-3	26.1	0.129	0.429		2
06132	Cobalt	7440-48-4	6.33	0.0215	0.107		2
06133	Copper	7440-50-8	42.8	0.0858	0.429		2
06135	Lead	7439-92-1	49.5	0.0109	0.215		2
06138	Molybdenum	7439-98-7	0.932	0.0536	0.107		2
06139	Nickel	7440-02-0	23.9	0.107	0.429		2
06141	Selenium	7782-49-2	0.100 J	0.0622	0.429		2
06142	Silver	7440-22-4	0.217	0.0152	0.107		2
06145	Thallium	7440-28-0	0.303	0.0322	0.107		2
06148	Vanadium	7440-62-2	35.9	0.0236	0.107		2
06149	Zinc	7440-66-6	90.2	0.601	3.22		2
SW-846 7471A			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0712 J	0.0077	0.109		1
Wet Chemistry			mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	14.8	0.88	1.1		1
EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	33.1		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.27 J	0.21	1.1		1

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

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

Sample Description: SL-009-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434471
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6604 SDG#: DE266-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	9.61	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	9.5	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 11:27	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 06:14	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112860020A	10/19/2011 18:52	Jessica L Miller	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112860020A	10/14/2011 06:45	Katheryne V Sponheimer	1
01643	Aluminum	SW-846 6010B	1	112855708001	10/21/2011 04:39	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112855708001	10/20/2011 02:20	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112855708001	10/21/2011 04:39	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112855708001	10/21/2011 04:39	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112855708001	10/20/2011 02:20	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112855708001	10/21/2011 04:39	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112855708001	10/20/2011 02:20	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112855708001	10/20/2011 02:20	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112855708001	10/21/2011 04:39	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112855708001	10/20/2011 02:20	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112855708001	10/20/2011 02:20	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112855708001	10/21/2011 04:39	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112855708001	10/20/2011 02:20	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112855708001	10/20/2011 02:20	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112851026001D	10/13/2011 08:59	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2

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

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

Sample Description: SL-009-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434471
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6604 SDG#: DE266-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112851026001C	10/13/2011 08:59	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112851026001B	10/13/2011 08:59	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112851026001A	10/13/2011 08:59	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112855711001	10/13/2011 09:02	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112855708001	10/12/2011 22:12	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112851026001	10/12/2011 22:14	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112855711001	10/13/2011 01:15	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201A	10/25/2011 21:45	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202A	10/20/2011 03:53	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11291243201A	10/20/2011 13:14	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201A	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202A	10/19/2011 08:05	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11294039401A	10/21/2011 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11291162401B	10/18/2011 21:20	Scott W Freisher	1

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

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

Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434472
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6605 SDG#: DE266-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	17.2 U	17.2	34.3		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	510		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400		1
04688	Benzoic acid	65-85-0	170	U 170	510		1
04688	Benzyl alcohol	100-51-6	170	U 170	510		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170		1
04688	4-Chloroaniline	106-47-8	68	U 68	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170		1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	510		1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	68	U 68	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	510		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	34	U 34	170		1
04688	4-Methylphenol	106-44-5	34	U 34	170		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	34	U 34	170		1
04688	4-Nitroaniline	100-01-6	68	U 68	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	510		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1

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

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

Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434472
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6605 SDG#: DE266-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U 170	510		1
04688	Phenol	108-95-2	17	U 17	170		1
04688	Tetralin	119-64-2	170	U 170	170		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170		1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69 U	0.69	1.7		1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.7		1
10138	Anthracene	120-12-7	0.35 U	0.35	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.69 U	0.69	1.7		1
10138	Benzo(a)pyrene	50-32-8	2.2	0.69	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	1.8	0.69	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	1.7 J	0.69	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	2.3	0.69	1.7		1
10138	Butylbenzylphthalate	85-68-7	6.2 U	6.2	19		1
10138	Di-n-butylphthalate	84-74-2	6.2 U	6.2	19		1
10138	Chrysene	218-01-9	1.2 J	0.35	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.69 U	0.69	1.7		1
10138	Diethylphthalate	84-66-2	6.2 U	6.2	19		1
10138	Dimethylphthalate	131-11-3	6.2 U	6.2	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	34	6.2	19		1
10138	Fluoranthene	206-44-0	0.69 U	0.69	1.7		1
10138	Fluorene	86-73-7	0.69 U	0.69	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.69 U	0.69	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.69 U	0.69	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.69 U	0.69	1.7		1
10138	Naphthalene	91-20-3	0.69 U	0.69	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.69 U	0.69	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.2 U	6.2	19		1
10138	Phenanthrene	85-01-8	0.69 U	0.69	1.7		1
10138	Pyrene	129-00-0	0.75 J	0.69	1.7		1
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.0		24.04

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

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



Analysis Report

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

Page 3 of 7

Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434472
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6605 SDG#: DE266-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	62 U	62	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	42 U	42	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	83 U	83	250	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	83 U	83	250	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	42 U	42	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	42 U	42	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	42 U	42	120	1000000 0	1
10132	HMX	2691-41-0	100 U	100	310	1000000 0	1
10132	Nitrobenzene	98-95-3	42 U	42	120	1000000 0	1
10132	Nitroglycerin	55-63-0	830 U	830	2,500	1000000 0	1
10132	2-Nitrotoluene	88-72-2	83 U	83	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100 U	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	83 U	83	120	1000000 0	1
10132	PETN	78-11-5	830 U	830	2,500	1000000 0	1
10132	RDX	121-82-4	52 U	52	120	1000000 0	1
10132	Tetryl	479-45-8	64 U	64	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	42 U	42	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	42 U	42	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	1,200 U	1,200	3,100		1
Reporting limits were raised due to limited sample volume.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4		1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4		1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4		1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8		1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.8		1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.8		1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.8		1

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Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434472
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6605 SDG#: DE266-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8		1
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.8		1
10225	PCB-1260	11096-82-5	0.41 U	0.41	1.8		1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	520		1
10501	Isopropanol	67-63-0	100 U	100	520		1
10501	Methanol	67-56-1	100 U	100	520		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.2 U	5.2	10		1
08283	Ethylene glycol	107-21-1	5.2 U	5.2	10		1
08283	Propylene glycol	57-55-6	5.2 U	5.2	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.6		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.6		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.6		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.42 U	0.42	1.2		1
10199	EFH (C15-C20)	n.a.	1.0 J	0.42	1.2		1
10199	EFH (C21-C30)	n.a.	5.9	0.42	1.2		1
10199	EFH (C30 - C40)	n.a.	21	0.42	1.2		1
10199	EFH (C8-C11)	n.a.	0.42 U	0.42	1.2		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,900	6.05	20.0		1
07914	Boron	7440-42-8	0.360 U	0.360	5.00		1
01650	Calcium	7440-70-2	3,410	2.50	20.0		1
01654	Iron	7439-89-6	20,000	2.61	20.0		1
01656	Lithium	7439-93-2	25.2	0.62	2.0		1
01657	Magnesium	7439-95-4	4,650	0.440	10.0		1
06958	Manganese	7439-96-5	283	0.0360	0.500		1
10145	Phosphorus	7723-14-0	347	0.350	10.0		1
01662	Potassium	7440-09-7	2,670	11.3	50.0		1
01667	Sodium	7440-23-5	77.8 J	5.95	100		1
07968	Strontium	7440-24-6	13.8	0.0250	0.500		1
06969	Tin	7440-31-5	2.80 J	0.320	10.0		1
06970	Titanium	7440-32-6	1,140	0.0710	1.00		1
10146	Zirconium	7440-67-7	1.83 J	0.460	5.00		1

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

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

Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434472
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6605 SDG#: DE266-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.142 J	0.0762	0.206		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.77	0.0824	0.412		2
06126	Barium	7440-39-3	107	0.109	0.412		2
06127	Beryllium	7440-41-7	0.536	0.0165	0.103		2
06128	Cadmium	7440-43-9	0.119	0.0453	0.103		2
06131	Chromium	7440-47-3	19.3	0.124	0.412		2
06132	Cobalt	7440-48-4	6.87	0.0206	0.103		2
06133	Copper	7440-50-8	8.41	0.0824	0.412		2
06135	Lead	7439-92-1	5.32	0.0105	0.206		2
06138	Molybdenum	7439-98-7	0.432	0.0515	0.103		2
06139	Nickel	7440-02-0	14.2	0.103	0.412		2
06141	Selenium	7782-49-2	0.140 J	0.0598	0.412		2
06142	Silver	7440-22-4	0.0173 J	0.0146	0.103		2
06145	Thallium	7440-28-0	0.334	0.0309	0.103		2
06148	Vanadium	7440-62-2	39.2	0.0227	0.103		2
06149	Zinc	7440-66-6	73.4	0.577	3.09		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0087 J	0.0070	0.0988		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6	0.83	1.0		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.92 J	0.83	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.2		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.64 J	0.20	1.0		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.18 U	0.18	0.49		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	8.15	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	3.9	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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

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

Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434472
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6605 SDG#: DE266-05

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-049-SA7-SB-4.5.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11285SLG026	10/17/2011 22:43	Matthew S Woods	1
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 11:52	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 06:47	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11285SLG026	10/13/2011 06:25	Roman Kuropatkin	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16A	10/18/2011 03:01	Laura M Krieger	24.04
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128525828	10/12/2011 14:16	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128525828	10/12/2011 14:17	Larry E Bevins	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 13:06	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112860003A	10/14/2011 18:47	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112860020A	10/19/2011 19:11	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112860020A	10/14/2011 06:45	Katheryne V Sponheimer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112860003A	10/13/2011 13:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112850037A	10/13/2011 20:00	Elizabeth J Marin	1
08283	19a Glycols by 8015B modified	SW-846 8015B	1	112870018A	10/18/2011 02:12	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/22/2011 03:30	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel modified	SW-846 8015B	1	112860009A	10/15/2011 04:01	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112860009A	10/13/2011 14:00	David S Schrum	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112850037A	10/13/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112870018A	10/14/2011 17:15	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112855708001	10/21/2011 04:43	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112855708001	10/20/2011 02:24	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112855708001	10/21/2011 04:43	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112855708001	10/21/2011 04:43	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112855708001	10/20/2011 02:24	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112855708001	10/21/2011 04:43	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112855708001	10/20/2011 02:24	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112855708001	10/20/2011 02:24	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112855708001	10/21/2011 04:43	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112855708001	10/20/2011 02:24	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112855708001	10/20/2011 02:24	Tara L Snyder	1

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

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

Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434472
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6605 SDG#: DE266-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	112855708001	10/21/2011 04:43	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112855708001	10/20/2011 02:24	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112855708001	10/20/2011 02:24	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112851026001D	10/13/2011 09:02	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112851026001C	10/13/2011 09:02	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112851026001B	10/13/2011 09:02	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112851026001A	10/13/2011 09:02	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112855711001	10/13/2011 09:03	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112855708001	10/12/2011 22:12	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112851026001	10/12/2011 22:14	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112855711001	10/13/2011 01:15	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201A	10/25/2011 22:01	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11297495201A	10/25/2011 22:01	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202A	10/20/2011 04:16	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11291243201A	10/20/2011 13:27	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11290102201B	10/17/2011 20:35	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201A	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202A	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11290102201B	10/17/2011 16:45	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11294039401A	10/21/2011 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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

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

Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434473
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6606 SDG#: DE266-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	175 U	175	350		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U 180	530		1
04688	Benzyl alcohol	100-51-6	180	U 180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Di-n-butylphthalate	84-74-2	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180		1
04688	4-Chloroaniline	106-47-8	70	U 70	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	Diethylphthalate	84-66-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180		1
04688	Dimethylphthalate	131-11-3	18	U 18	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530		1
04688	2,4-Dinitrophenol	51-28-5	350	U 350	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	35	U 35	180		1
04688	4-Methylphenol	106-44-5	35	U 35	180		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	35	U 35	180		1
04688	4-Nitroaniline	100-01-6	70	U 70	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	530		1

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

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

Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434473
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6606 SDG#: DE266-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	18	U 18	180		1
04688	Pentachlorophenol	87-86-5	180	U 180	530		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	Tetralin	119-64-2	180	U 180	180		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.5	U 3.5	8.8	5
10138	Acenaphthylene	208-96-8	1.8	U 1.8	8.8	5
10138	Anthracene	120-12-7	1.8	U 1.8	8.8	5
10138	Benzo(a)anthracene	56-55-3	6.2	J 3.5	8.8	5
10138	Benzo(a)pyrene	50-32-8	7.6	J 3.5	8.8	5
10138	Benzo(b)fluoranthene	205-99-2	16	J 3.5	8.8	5
10138	Benzo(g,h,i)perylene	191-24-2	4.2	J 3.5	8.8	5
10138	Benzo(k)fluoranthene	207-08-9	9.1	J 3.5	8.8	5
10138	Butylbenzylphthalate	85-68-7	58	J 32	95	5
10138	Chrysene	218-01-9	6.9	J 1.8	8.8	5
10138	Dibenz(a,h)anthracene	53-70-3	3.5	U 3.5	8.8	5
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	78	J 32	95	5
10138	Fluoranthene	206-44-0	18	J 3.5	8.8	5
10138	Fluorene	86-73-7	3.5	U 3.5	8.8	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	J 3.5	8.8	5
10138	1-Methylnaphthalene	90-12-0	3.5	U 3.5	8.8	5
10138	2-Methylnaphthalene	91-57-6	3.5	U 3.5	8.8	5
10138	Naphthalene	91-20-3	3.5	U 3.5	8.8	5
10138	N-Nitrosodimethylamine	62-75-9	3.5	U 3.5	8.8	5
10138	Phenanthrene	85-01-8	5.2	J 3.5	8.8	5
10138	Pyrene	129-00-0	11	J 3.5	8.8	5

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

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	62	U 62	120
					1000000 0

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

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

Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434473
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6606 SDG#: DE266-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	41 U	41	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	83 U	83	250	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	83 U	83	250	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	41 U	41	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	41 U	41	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	41 U	41	120	1000000 0	1
10132	HMX	2691-41-0	100 U	100	310	1000000 0	1
10132	Nitrobenzene	98-95-3	41 U	41	120	1000000 0	1
10132	Nitroglycerin	55-63-0	830 U	830	2,500	1000000 0	1
10132	2-Nitrotoluene	88-72-2	83 U	83	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100 U	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	83 U	83	120	1000000 0	1
10132	PETN	78-11-5	830 U	830	2,500	1000000 0	1
10132	RDX	121-82-4	52 U	52	120	1000000 0	1
10132	Tetryl	479-45-8	63 U	63	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	41 U	41	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	41 U	41	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	630 U	630	1,600		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.35 U	0.35	1.8		1
10225	PCB-1232	11141-16-5	0.35 U	0.35	1.8		1
10225	PCB-1242	53469-21-9	0.35 U	0.35	1.8		1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8		1
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8		1
10225	PCB-1260	11096-82-5	1.3 J	0.41	1.8		1

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Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434473
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6606 SDG#: DE266-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	530		1
10501	Isopropanol	67-63-0	110 U	110	530		1
10501	Methanol	67-56-1	110 U	110	530		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.3 U	5.3	11		1
08283	Ethylene glycol	107-21-1	5.3 U	5.3	11		1
08283	Propylene glycol	57-55-6	5.3 U	5.3	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.7		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.7		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.7		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	2.1 U	2.1	6.3		5
10199	EFH (C15-C20)	n.a.	2.1 U	2.1	6.3		5
10199	EFH (C21-C30)	n.a.	14	2.1	6.3		5
10199	EFH (C30 - C40)	n.a.	75	2.1	6.3		5
10199	EFH (C8-C11)	n.a.	2.1 U	2.1	6.3		5
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,500	6.33	20.9		1
07914	Boron	7440-42-8	0.377 U	0.377	5.23		1
01650	Calcium	7440-70-2	2,800	2.62	20.9		1
01654	Iron	7439-89-6	19,100	2.73	20.9		1
01656	Lithium	7439-93-2	24.3	0.65	2.1		1
01657	Magnesium	7439-95-4	4,180	0.461	10.5		1
06958	Manganese	7439-96-5	256	0.0377	0.523		1
10145	Phosphorus	7723-14-0	370	0.366	10.5		1
01662	Potassium	7440-09-7	3,120	11.8	52.3		1
01667	Sodium	7440-23-5	64.3 J	6.23	105		1
07968	Strontium	7440-24-6	13.9	0.0262	0.523		1
06969	Tin	7440-31-5	2.93 J	0.335	10.5		1
06970	Titanium	7440-32-6	1,120	0.0743	1.05		1
10146	Zirconium	7440-67-7	1.88 J	0.481	5.23		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.135 J	0.0759	0.205		2

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Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434473
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6606 SDG#: DE266-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.37	0.0821	0.411		2
06126	Barium	7440-39-3	100	0.109	0.411		2
06127	Beryllium	7440-41-7	0.525	0.0164	0.103		2
06128	Cadmium	7440-43-9	0.127	0.0452	0.103		2
06131	Chromium	7440-47-3	18.5	0.123	0.411		2
06132	Cobalt	7440-48-4	6.40	0.0205	0.103		2
06133	Copper	7440-50-8	8.65	0.0821	0.411		2
06135	Lead	7439-92-1	5.67	0.0105	0.205		2
06138	Molybdenum	7439-98-7	0.424	0.0513	0.103		2
06139	Nickel	7440-02-0	12.9	0.103	0.411		2
06141	Selenium	7782-49-2	0.121 J	0.0595	0.411		2
06142	Silver	7440-22-4	0.0222 J	0.0146	0.103		2
06145	Thallium	7440-28-0	0.308	0.0308	0.103		2
06148	Vanadium	7440-62-2	36.8	0.0226	0.103		2
06149	Zinc	7440-66-6	72.0	0.575	3.08		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0085 J	0.0073	0.104		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8	0.85	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.95 J	0.85	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.7		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.27 J	0.21	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.53		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.65	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	5.4	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434473
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6606 SDG#: DE266-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11285SLG026	10/17/2011 23:02	Matthew S Woods	10
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 12:18	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 07:21	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11285SLG026	10/13/2011 06:25	Roman Kuropatkin	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 15:14	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112860003A	10/14/2011 18:56	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112860020A	10/19/2011 19:30	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112860020A	10/14/2011 06:45	Katheryne V Sponheimer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112860003A	10/13/2011 13:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112850037A	10/13/2011 20:17	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112870018A	10/18/2011 02:25	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/22/2011 04:14	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112860009A	10/15/2011 05:12	Heather E Williams	5
11238	EFH Extraction - Soils	SW-846 3550B	1	112860009A	10/13/2011 14:00	David S Schrum	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112850037A	10/13/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112870018A	10/14/2011 17:15	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112855708001	10/21/2011 04:47	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112855708001	10/20/2011 02:28	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112855708001	10/21/2011 04:47	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112855708001	10/21/2011 04:47	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112855708001	10/20/2011 02:28	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112855708001	10/21/2011 04:47	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112855708001	10/20/2011 02:28	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112855708001	10/20/2011 02:28	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112855708001	10/21/2011 04:47	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112855708001	10/20/2011 02:28	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112855708001	10/20/2011 02:28	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112855708001	10/21/2011 04:47	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112855708001	10/20/2011 02:28	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112855708001	10/20/2011 02:28	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2

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Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434473
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6606 SDG#: DE266-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	112851026001D	10/13/2011 09:05	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112851026001C	10/13/2011 09:05	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112851026001B	10/13/2011 09:05	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112851026001A	10/13/2011 09:05	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112855711001	10/13/2011 09:05	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112855708001	10/12/2011 22:12	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112851026001	10/12/2011 22:14	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112855711001	10/13/2011 01:15	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201A	10/25/2011 22:48	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11297495201A	10/25/2011 22:48	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202A	10/20/2011 04:39	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 13:34	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11290102201B	10/17/2011 20:39	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201A	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202A	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11290102201B	10/17/2011 16:45	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11294039401A	10/21/2011 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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

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

Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434474
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6607 SDG#: DE266-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	174 U	174	348		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	510		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400		1
04688	Benzo(a)anthracene	56-55-3	27	J 17	170		1
04688	Benzo(a)pyrene	50-32-8	25	J 17	170		1
04688	Benzo(b)fluoranthene	205-99-2	35	J 17	170		1
04688	Benzo(g,h,i)perylene	191-24-2	18	J 17	170		1
04688	Benzo(k)fluoranthene	207-08-9	19	J 17	170		1
04688	Benzoic acid	65-85-0	170	U 170	510		1
04688	Benzyl alcohol	100-51-6	170	U 170	510		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Butylbenzylphthalate	85-68-7	17	U 17	170		1
04688	Di-n-butylphthalate	84-74-2	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170		1
04688	4-Chloroaniline	106-47-8	69	U 69	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170		1
04688	Chrysene	218-01-9	30	J 17	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	Diethylphthalate	84-66-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170		1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170		1
04688	Dimethylphthalate	131-11-3	17	U 17	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	510		1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U 17	340		1
04688	Fluoranthene	206-44-0	55	J 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	510		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	18	J 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	34	U 34	170		1

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

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

Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434474
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6607 SDG#: DE266-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	4-Methylphenol	106-44-5	34	U 34	170		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	34	U 34	170		1
04688	4-Nitroaniline	100-01-6	69	U 69	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	510		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	17	U 17	170		1
04688	Pentachlorophenol	87-86-5	170	U 170	510		1
04688	Phenanthrene	85-01-8	27	J 17	170		1
04688	Phenol	108-95-2	17	U 17	170		1
04688	Pyrene	129-00-0	44	J 17	170		1
04688	Tetralin	119-64-2	170	U 170	170		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170		1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.5	U 3.5	8.7		5
10138	Acenaphthylene	208-96-8	1.7	U 1.7	8.7		5
10138	Anthracene	120-12-7	2.9	J 1.7	8.7		5
10138	Dibenz(a,h)anthracene	53-70-3	3.5	U 3.5	8.7		5
10138	Fluorene	86-73-7	3.5	U 3.5	8.7		5
10138	1-Methylnaphthalene	90-12-0	3.5	U 3.5	8.7		5
10138	2-Methylnaphthalene	91-57-6	3.5	U 3.5	8.7		5
10138	Naphthalene	91-20-3	3.5	U 3.5	8.7		5
10138	N-Nitrosodimethylamine	62-75-9	3.5	U 3.5	8.7		5
	Reporting limits were raised due to interference from the sample matrix.						
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	2.4	U 2.4	12		281.53
	Reporting limits were raised due to sample foaming.						

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Analysis Report

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

Page 3 of 7

Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434474
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6607 SDG#: DE266-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*		Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg		ug/kg		ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	61	U	61		120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	41	U	41		120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	82	U	82		250	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	82	U	82		250	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	41	U	41		120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	41	U	41		120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	41	U	41		120	1000000 0	1
10132	HMX	2691-41-0	100	U	100		310	1000000 0	1
10132	Nitrobenzene	98-95-3	41	U	41		120	1000000 0	1
10132	Nitroglycerin	55-63-0	820	U	820		2,500	1000000 0	1
10132	2-Nitrotoluene	88-72-2	82	U	82		120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100	U	100		120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	82	U	82		120	1000000 0	1
10132	PETN	78-11-5	820	U	820		2,500	1000000 0	1
10132	RDX	121-82-4	51	U	51		120	1000000 0	1
10132	Tetryl	479-45-8	63	U	63		120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	41	U	41		120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	41	U	41		120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg		ug/kg		ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	630	U	630		1,600		1
Pesticides/PCBs		SW-846 8082	ug/kg		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0		3.4		1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0		3.4		1
10225	Aroclor 5460	11126-42-4	1.0	U	1.0		3.4		1
10225	PCB-1016	12674-11-2	0.34	U	0.34		1.8		1
10225	PCB-1221	11104-28-2	0.34	U	0.34		1.8		1
10225	PCB-1232	11141-16-5	0.34	U	0.34		1.8		1
10225	PCB-1242	53469-21-9	0.34	U	0.34		1.8		1
10225	PCB-1248	12672-29-6	0.34	U	0.34		1.8		1

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Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434474
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Project Name: SSFL Area IV Collocated Soil Sampling

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14420 Albemarle Point Place
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Reported: 10/28/2011 13:28

E6607 SDG#: DE266-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.8		1
10225	PCB-1260	11096-82-5	2.3	0.41	1.8		1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	520		1
10501	Isopropanol	67-63-0	100 U	100	520		1
10501	Methanol	67-56-1	100 U	100	520		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.2 U	5.2	10		1
08283	Ethylene glycol	107-21-1	5.2 U	5.2	10		1
08283	Propylene glycol	57-55-6	5.2 U	5.2	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.7		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.7		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.7		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	4.2 U	4.2	13		10
10199	EFH (C15-C20)	n.a.	4.2 U	4.2	13		10
10199	EFH (C21-C30)	n.a.	71	4.2	13		10
10199	EFH (C30 - C40)	n.a.	250	4.2	13		10
10199	EFH (C8-C11)	n.a.	4.2 U	4.2	13		10
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,800	6.26	20.7		1
07914	Boron	7440-42-8	0.372 U	0.372	5.17		1
01650	Calcium	7440-70-2	2,830	2.59	20.7		1
01654	Iron	7439-89-6	19,400	2.70	20.7		1
01656	Lithium	7439-93-2	25.1	0.64	2.1		1
01657	Magnesium	7439-95-4	4,350	0.455	10.3		1
06958	Manganese	7439-96-5	269	0.0372	0.517		1
10145	Phosphorus	7723-14-0	353	0.362	10.3		1
01662	Potassium	7440-09-7	3,040	11.7	51.7		1
01667	Sodium	7440-23-5	72.2 J	6.16	103		1
07968	Strontium	7440-24-6	13.0	0.0259	0.517		1
06969	Tin	7440-31-5	2.86 J	0.331	10.3		1
06970	Titanium	7440-32-6	1,190	0.0735	1.03		1
10146	Zirconium	7440-67-7	1.89 J	0.476	5.17		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	

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Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434474
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

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Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6607 SDG#: DE266-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.168 J	0.0766	0.207		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.64	0.0828	0.414		2
06126	Barium	7440-39-3	101	0.110	0.414		2
06127	Beryllium	7440-41-7	0.536	0.0166	0.103		2
06128	Cadmium	7440-43-9	0.132	0.0455	0.103		2
06131	Chromium	7440-47-3	17.6	0.124	0.414		2
06132	Cobalt	7440-48-4	6.26	0.0207	0.103		2
06133	Copper	7440-50-8	8.59	0.0828	0.414		2
06135	Lead	7439-92-1	6.71	0.0106	0.207		2
06138	Molybdenum	7439-98-7	0.408	0.0517	0.103		2
06139	Nickel	7440-02-0	12.7	0.103	0.414		2
06141	Selenium	7782-49-2	0.112 J	0.0600	0.414		2
06142	Silver	7440-22-4	0.0263 J	0.0147	0.103		2
06145	Thallium	7440-28-0	0.305	0.0310	0.103		2
06148	Vanadium	7440-62-2	37.3	0.0228	0.103		2
06149	Zinc	7440-66-6	83.7	0.579	3.10		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0099 J	0.0072	0.102		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8	0.83	1.0		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.95 J	0.83	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.3		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.0		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.52		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.75	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	4.3	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434474
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6607 SDG#: DE266-07

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-166-SA7-SB-1.5.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11285SLG026	10/17/2011 23:21	Matthew S Woods	10
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 12:43	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 08:27	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11285SLG026	10/13/2011 06:25	Roman Kuropatkin	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16A	10/18/2011 16:20	Laura M Krieger	281.53
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128525828	10/12/2011 14:23	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128525828	10/12/2011 14:23	Larry E Bevins	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 15:56	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112860003A	10/14/2011 19:06	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112860020A	10/19/2011 19:49	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112860020A	10/14/2011 06:45	Katheryne V Sponheimer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112860003A	10/13/2011 13:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112850037A	10/13/2011 20:33	Elizabeth J Marin	1
08283	19a Glycols by 8015B modified	SW-846 8015B	1	112870018A	10/18/2011 02:38	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/22/2011 06:49	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel modified	SW-846 8015B	1	112860009A	10/15/2011 06:24	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	112860009A	10/13/2011 14:00	David S Schrum	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112850037A	10/13/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112870018A	10/14/2011 17:15	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112855708001	10/21/2011 04:50	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112855708001	10/20/2011 02:32	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112855708001	10/21/2011 04:50	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112855708001	10/21/2011 04:50	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112855708001	10/20/2011 02:32	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112855708001	10/21/2011 04:50	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112855708001	10/20/2011 02:32	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112855708001	10/20/2011 02:32	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112855708001	10/21/2011 04:50	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112855708001	10/20/2011 02:32	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112855708001	10/20/2011 02:32	Tara L Snyder	1

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

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

Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434474
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6607 SDG#: DE266-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	112855708001	10/21/2011 04:50	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112855708001	10/20/2011 02:32	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112855708001	10/20/2011 02:32	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112851026001D	10/13/2011 09:08	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112851026001C	10/13/2011 09:08	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112851026001B	10/13/2011 09:08	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112851026001A	10/13/2011 09:08	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112855711001	10/13/2011 09:06	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112855708001	10/12/2011 22:12	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112851026001	10/12/2011 22:14	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112855711001	10/13/2011 01:15	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201A	10/25/2011 23:04	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11297495201A	10/25/2011 23:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202A	10/20/2011 05:03	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 13:47	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11290102201B	10/17/2011 20:40	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201A	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202A	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11290102201B	10/17/2011 16:45	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11294039401B	10/21/2011 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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



Analysis Report

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Page 1 of 7

Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434475
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6608 SDG#: DE266-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	174 U	174	349		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	57	J 17	170		1
04688	Aniline	62-53-3	170	U 170	520		1
04688	Anthracene	120-12-7	200	17	170		1
04688	Benidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzo(a)anthracene	56-55-3	970	17	170		1
04688	Benzo(a)pyrene	50-32-8	920	17	170		1
04688	Benzo(b)fluoranthene	205-99-2	1,200	17	170		1
04688	Benzo(g,h,i)perylene	191-24-2	710	17	170		1
04688	Benzo(k)fluoranthene	207-08-9	490	17	170		1
04688	Benzoic acid	65-85-0	170	U 170	520		1
04688	Benzyl alcohol	100-51-6	170	U 170	520		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Butylbenzylphthalate	85-68-7	17	U 17	170		1
04688	Di-n-butylphthalate	84-74-2	17	U 17	170		1
04688	Carbazole	86-74-8	250	17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170		1
04688	4-Chloroaniline	106-47-8	69	U 69	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170		1
04688	Chrysene	218-01-9	1,200	17	170		1
04688	Dibenz(a,h)anthracene	53-70-3	190	17	170		1
04688	Dibenzofuran	132-64-9	53	J 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	Diethylphthalate	84-66-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170		1
04688	Dimethylphthalate	131-11-3	17	U 17	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520		1
04688	2,4-Dinitrophenol	51-28-5	350	U 350	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	24	J 17	350		1
04688	Fluoranthene	206-44-0	2,700	17	170		1
04688	Fluorene	86-73-7	58	J 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520		1

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

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

Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434475
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6608 SDG#: DE266-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	670	17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	35	U 35	170		1
04688	4-Methylphenol	106-44-5	35	U 35	170		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	35	U 35	170		1
04688	4-Nitroaniline	100-01-6	69	U 69	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	520		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	17	U 17	170		1
04688	Pentachlorophenol	87-86-5	170	U 170	520		1
04688	Phenanthrene	85-01-8	1,500	17	170		1
04688	Phenol	108-95-2	19	J 17	170		1
04688	Pyrene	129-00-0	2,100	17	170		1
04688	Tetralin	119-64-2	170	U 170	170		1
1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.							
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	170		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	170		1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:							
4,6-dinitro-2-methylphenol							
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthylene	208-96-8	1.8	U 1.8	8.8		5
10138	1-Methylnaphthalene	90-12-0	3.5	U 3.5	8.8		5
10138	2-Methylnaphthalene	91-57-6	3.5	U 3.5	8.8		5
10138	Naphthalene	91-20-3	3.5	U 3.5	8.8		5
10138	N-Nitrosodimethylamine	62-75-9	3.5	U 3.5	8.8		5
Reporting limits were raised due to interference from the sample matrix.							
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.9	J 0.2	1.1		26.04

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

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Analysis Report

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Page 3 of 7

Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434475
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6608 SDG#: DE266-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	62 U	62	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	41 U	41	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	83 U	83	250	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	83 U	83	250	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	41 U	41	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	41 U	41	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	41 U	41	120	1000000 0	1
10132	HMX	2691-41-0	100 U	100	310	1000000 0	1
10132	Nitrobenzene	98-95-3	41 U	41	120	1000000 0	1
10132	Nitroglycerin	55-63-0	830 U	830	2,500	1000000 0	1
10132	2-Nitrotoluene	88-72-2	83 U	83	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100 U	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	83 U	83	120	1000000 0	1
10132	PETN	78-11-5	830 U	830	2,500	1000000 0	1
10132	RDX	121-82-4	52 U	52	120	1000000 0	1
10132	Tetryl	479-45-8	63 U	63	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	41 U	41	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	41 U	41	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	630 U	630	1,600		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	2.0 J	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.35 U	0.35	1.8		1
10225	PCB-1232	11141-16-5	0.35 U	0.35	1.8		1
10225	PCB-1242	53469-21-9	0.35 U	0.35	1.8		1
10225	PCB-1248	12672-29-6	0.48 J	0.35	1.8		1

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

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

Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434475
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6608 SDG#: DE266-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8		1
10225	PCB-1260	11096-82-5	2.4	0.41	1.8		1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	530		1
10501	Isopropanol	67-63-0	110 U	110	530		1
10501	Methanol	67-56-1	110 U	110	530		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.3 U	5.3	11		1
08283	Ethylene glycol	107-21-1	5.3 U	5.3	11		1
08283	Propylene glycol	57-55-6	5.3 U	5.3	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.7		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.7		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.7		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	2.1 U	2.1	6.3		5
10199	EFH (C15-C20)	n.a.	2.1 U	2.1	6.3		5
10199	EFH (C21-C30)	n.a.	17	2.1	6.3		5
10199	EFH (C30 - C40)	n.a.	93	2.1	6.3		5
10199	EFH (C8-C11)	n.a.	2.1 U	2.1	6.3		5
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,600	6.24	20.6		1
07914	Boron	7440-42-8	0.372 U	0.372	5.16		1
01650	Calcium	7440-70-2	3,220	2.58	20.6		1
01654	Iron	7439-89-6	19,900	2.69	20.6		1
01656	Lithium	7439-93-2	26.5	0.64	2.1		1
01657	Magnesium	7439-95-4	4,410	0.454	10.3		1
06958	Manganese	7439-96-5	271	0.0372	0.516		1
10145	Phosphorus	7723-14-0	363	0.361	10.3		1
01662	Potassium	7440-09-7	2,990	11.7	51.6		1
01667	Sodium	7440-23-5	64.9 J	6.14	103		1
07968	Strontium	7440-24-6	14.8	0.0258	0.516		1
06969	Tin	7440-31-5	2.95 J	0.330	10.3		1
06970	Titanium	7440-32-6	1,150	0.0733	1.03		1
10146	Zirconium	7440-67-7	1.89 J	0.475	5.16		1
SW-846 6020			mg/kg	mg/kg	mg/kg	mg/kg	

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

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

Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434475
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6608 SDG#: DE266-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.163 J	0.0756	0.204		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.78	0.0818	0.409		2
06126	Barium	7440-39-3	104	0.108	0.409		2
06127	Beryllium	7440-41-7	0.577	0.0164	0.102		2
06128	Cadmium	7440-43-9	0.162	0.0450	0.102		2
06131	Chromium	7440-47-3	21.6	0.123	0.409		2
06132	Cobalt	7440-48-4	6.74	0.0204	0.102		2
06133	Copper	7440-50-8	8.76	0.0818	0.409		2
06135	Lead	7439-92-1	7.03	0.0104	0.204		2
06138	Molybdenum	7439-98-7	0.434	0.0511	0.102		2
06139	Nickel	7440-02-0	13.4	0.102	0.409		2
06141	Selenium	7782-49-2	0.101 J	0.0593	0.409		2
06142	Silver	7440-22-4	0.0378 J	0.0145	0.102		2
06145	Thallium	7440-28-0	0.312	0.0307	0.102		2
06148	Vanadium	7440-62-2	40.5	0.0225	0.102		2
06149	Zinc	7440-66-6	90.2	0.572	3.07		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0069 U	0.0069	0.0983		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5	0.84	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2 J	0.84	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.6		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.52		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.88	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	5.0	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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

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

Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434475
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6608 SDG#: DE266-08

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-167-SA7-SB-1.0.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11285SLG026	10/17/2011 23:40	Matthew S Woods	10
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 13:08	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 09:01	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11285SLG026	10/13/2011 06:25	Roman Kuropatkin	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16A	10/18/2011 18:13	Laura M Krieger	26.04
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128525828	10/12/2011 14:17	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128525828	10/12/2011 14:18	Larry E Bevins	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 16:39	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112860003A	10/14/2011 19:25	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112860020A	10/19/2011 20:08	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112860020A	10/14/2011 06:45	Katheryne V Sponheimer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112860003A	10/13/2011 13:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112850037A	10/13/2011 20:50	Elizabeth J Marin	1
08283	19a Glycols by 8015B modified	SW-846 8015B	1	112870018A	10/18/2011 02:51	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/22/2011 04:59	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel modified	SW-846 8015B	1	112860009A	10/15/2011 05:36	Heather E Williams	5
11238	EFH Extraction - Soils	SW-846 3550B	1	112860009A	10/13/2011 14:00	David S Schrum	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112850037A	10/13/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112870018A	10/14/2011 17:15	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112855708001	10/21/2011 04:54	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112855708001	10/20/2011 02:36	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112855708001	10/21/2011 04:54	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112855708001	10/21/2011 04:54	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112855708001	10/20/2011 02:36	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112855708001	10/21/2011 04:54	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112855708001	10/20/2011 02:36	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112855708001	10/20/2011 02:36	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112855708001	10/21/2011 04:54	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112855708001	10/20/2011 02:36	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112855708001	10/20/2011 02:36	Tara L Snyder	1

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

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

Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434475
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6608 SDG#: DE266-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	112855708001	10/21/2011 04:54	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112855708001	10/20/2011 02:36	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112855708001	10/20/2011 02:36	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112851026001D	10/13/2011 09:17	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112851026001C	10/13/2011 09:17	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112851026001B	10/13/2011 09:17	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112851026001A	10/13/2011 09:17	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112855711001	10/13/2011 09:07	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112855708001	10/12/2011 22:12	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112851026001	10/12/2011 22:14	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112855711001	10/13/2011 01:15	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201B	10/26/2011 00:07	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11297495201B	10/26/2011 00:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202A	10/20/2011 05:26	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 14:01	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11290102201B	10/17/2011 20:41	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201B	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202A	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11290102201B	10/17/2011 16:45	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11294039401B	10/21/2011 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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

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

Sample Description: SL-168-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434476
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6609 SDG#: DE266-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	171 U	171	342		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400		1
04688	Benzo(a)anthracene	56-55-3	38	J 17	170		1
04688	Benzo(a)pyrene	50-32-8	49	J 17	170		1
04688	Benzo(b)fluoranthene	205-99-2	65	J 17	170		1
04688	Benzo(g,h,i)perylene	191-24-2	47	J 17	170		1
04688	Benzo(k)fluoranthene	207-08-9	27	J 17	170		1
04688	Benzoic acid	65-85-0	170	U 170	520		1
04688	Benzyl alcohol	100-51-6	170	U 170	520		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Butylbenzylphthalate	85-68-7	17	U 17	170		1
04688	Di-n-butylphthalate	84-74-2	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170		1
04688	4-Chloroaniline	106-47-8	69	U 69	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170		1
04688	Chrysene	218-01-9	45	J 17	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	Diethylphthalate	84-66-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170		1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170		1
04688	Dimethylphthalate	131-11-3	17	U 17	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520		1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	30	J 17	340		1
04688	Fluoranthene	206-44-0	94	J 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	40	J 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	34	U 34	170		1

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

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

Sample Description: SL-168-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434476
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6609 SDG#: DE266-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	4-Methylphenol	106-44-5	34	U 34	170		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	34	U 34	170		1
04688	4-Nitroaniline	100-01-6	69	U 69	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	520		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	17	U 17	170		1
04688	Pentachlorophenol	87-86-5	170	U 170	520		1
04688	Phenanthrene	85-01-8	49	J 17	170		1
04688	Phenol	108-95-2	17	U 17	170		1
04688	Pyrene	129-00-0	80	J 17	170		1
04688	Tetralin	119-64-2	170	U 170	170		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170		1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
4,6-dinitro-2-methylphenol

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.5	U 3.5	8.7	5
10138	Acenaphthylene	208-96-8	1.7	U 1.7	8.7	5
10138	Anthracene	120-12-7	1.7	U 1.7	8.7	5
10138	Dibenz(a,h)anthracene	53-70-3	3.5	U 3.5	8.7	5
10138	Fluorene	86-73-7	3.5	U 3.5	8.7	5
10138	1-Methylnaphthalene	90-12-0	3.5	U 3.5	8.7	5
10138	2-Methylnaphthalene	91-57-6	3.5	U 3.5	8.7	5
10138	Naphthalene	91-20-3	3.5	U 3.5	8.7	5
10138	N-Nitrosodimethylamine	62-75-9	3.5	U 3.5	8.7	5

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

GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U 0.2	1.1	26.43

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

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



Analysis Report

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

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Sample Description: SL-168-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434476
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6609 SDG#: DE266-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	61	U	61	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	41	U	41	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	82	U	82	240	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	82	U	82	240	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	41	U	41	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	41	U	41	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	41	U	41	120	1000000 0	1
10132	HMX	2691-41-0	100	U	100	310	1000000 0	1
10132	Nitrobenzene	98-95-3	41	U	41	120	1000000 0	1
10132	Nitroglycerin	55-63-0	820	U	820	2,400	1000000 0	1
10132	2-Nitrotoluene	88-72-2	82	U	82	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100	U	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	82	U	82	120	1000000 0	1
10132	PETN	78-11-5	820	U	820	2,400	1000000 0	1
10132	RDX	121-82-4	51	U	51	120	1000000 0	1
10132	Tetryl	479-45-8	62	U	62	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	41	U	41	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	41	U	41	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg		ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	620	U	620	1,600		1
Pesticides/PCBs		SW-846 8082	ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.4		1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.4		1
10225	Aroclor 5460	11126-42-4	2.1	J	1.0	3.4		1
10225	PCB-1016	12674-11-2	0.34	U	0.34	1.8		1
10225	PCB-1221	11104-28-2	0.34	U	0.34	1.8		1
10225	PCB-1232	11141-16-5	0.34	U	0.34	1.8		1
10225	PCB-1242	53469-21-9	0.34	U	0.34	1.8		1
10225	PCB-1248	12672-29-6	0.34	U	0.34	1.8		1

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

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

Sample Description: SL-168-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434476
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6609 SDG#: DE266-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.8		1
10225	PCB-1260	11096-82-5	4.0	0.41	1.8		1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	520		1
10501	Isopropanol	67-63-0	100 U	100	520		1
10501	Methanol	67-56-1	100 U	100	520		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.2 U	5.2	10		1
08283	Ethylene glycol	107-21-1	5.2 U	5.2	10		1
08283	Propylene glycol	57-55-6	5.2 U	5.2	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.6		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.6		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.6		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	2.1 U	2.1	6.2		5
10199	EFH (C15-C20)	n.a.	2.1 U	2.1	6.2		5
10199	EFH (C21-C30)	n.a.	32	2.1	6.2		5
10199	EFH (C30 - C40)	n.a.	120	2.1	6.2		5
10199	EFH (C8-C11)	n.a.	2.1 U	2.1	6.2		5
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,100	6.11	20.2		1
07914	Boron	7440-42-8	0.364 U	0.364	5.05		1
01650	Calcium	7440-70-2	2,920	2.53	20.2		1
01654	Iron	7439-89-6	19,100	2.64	20.2		1
01656	Lithium	7439-93-2	25.4	0.63	2.0		1
01657	Magnesium	7439-95-4	4,300	0.445	10.1		1
06958	Manganese	7439-96-5	269	0.0364	0.505		1
10145	Phosphorus	7723-14-0	371	0.354	10.1		1
01662	Potassium	7440-09-7	2,930	11.4	50.5		1
01667	Sodium	7440-23-5	63.1 J	6.01	101		1
07968	Strontium	7440-24-6	13.4	0.0253	0.505		1
06969	Tin	7440-31-5	2.82 J	0.323	10.1		1
06970	Titanium	7440-32-6	1,130	0.0717	1.01		1
10146	Zirconium	7440-67-7	1.85 J	0.465	5.05		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	

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

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

Sample Description: SL-168-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434476
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6609 SDG#: DE266-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0933 J	0.0755	0.204		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	3.49	0.0816	0.408		2
06126	Barium	7440-39-3	79.0	0.108	0.408		2
06127	Beryllium	7440-41-7	0.414	0.0163	0.102		2
06128	Cadmium	7440-43-9	0.146	0.0449	0.102		2
06131	Chromium	7440-47-3	14.2	0.122	0.408		2
06132	Cobalt	7440-48-4	5.04	0.0204	0.102		2
06133	Copper	7440-50-8	6.34	0.0816	0.408		2
06135	Lead	7439-92-1	5.26	0.0104	0.204		2
06138	Molybdenum	7439-98-7	0.320	0.0510	0.102		2
06139	Nickel	7440-02-0	9.62	0.102	0.408		2
06141	Selenium	7782-49-2	0.0808 J	0.0592	0.408		2
06142	Silver	7440-22-4	0.0234 J	0.0145	0.102		2
06145	Thallium	7440-28-0	0.212	0.0306	0.102		2
06148	Vanadium	7440-62-2	27.8	0.0224	0.102		2
06149	Zinc	7440-66-6	72.1	0.571	3.06		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0071 U	0.0071	0.101		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.9	0.83	1.0		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1 J	0.83	1.5		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.2		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.18 U	0.18	0.50		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.86	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	3.9	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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

Sample Description: SL-168-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434476
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6609 SDG#: DE266-09

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-168-SA7-SB-1.0.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11285SLG026	10/17/2011 23:59	Matthew S Woods	10
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 13:34	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 09:34	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11285SLG026	10/13/2011 06:25	Roman Kuropatkin	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16B	10/18/2011 20:06	Carrie E Miller	26.43
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128525828	10/12/2011 14:19	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128525828	10/12/2011 14:19	Larry E Bevins	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 17:21	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112860003A	10/14/2011 19:34	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112860020A	10/19/2011 20:26	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112860020A	10/14/2011 06:45	Katheryne V Sponheimer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112860003A	10/13/2011 13:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112850037A	10/13/2011 21:06	Elizabeth J Marin	1
08283	19a Glycols by 8015B modified	SW-846 8015B	1	112870018A	10/18/2011 03:04	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/22/2011 05:43	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel modified	SW-846 8015B	1	112860009A	10/15/2011 06:00	Heather E Williams	5
11238	EFH Extraction - Soils	SW-846 3550B	1	112860009A	10/13/2011 14:00	David S Schrum	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112850037A	10/13/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112870018A	10/14/2011 17:15	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112855708001	10/21/2011 05:06	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112855708001	10/20/2011 02:40	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112855708001	10/21/2011 05:06	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112855708001	10/21/2011 05:06	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112855708001	10/20/2011 02:40	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112855708001	10/21/2011 05:06	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112855708001	10/20/2011 02:40	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112855708001	10/20/2011 02:40	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112855708001	10/21/2011 05:06	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112855708001	10/20/2011 02:40	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112855708001	10/20/2011 02:40	Tara L Snyder	1

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

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

Sample Description: SL-168-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434476
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6609 SDG#: DE266-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	112855708001	10/21/2011 05:06	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112855708001	10/20/2011 02:40	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112855708001	10/20/2011 02:40	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112851026001D	10/13/2011 09:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112851026001C	10/13/2011 09:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112851026001B	10/13/2011 09:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112851026001A	10/13/2011 09:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112855711001	10/13/2011 09:09	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112855708001	10/12/2011 22:12	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112851026001	10/12/2011 22:14	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112855711001	10/13/2011 01:15	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201B	10/26/2011 00:22	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11297495201B	10/26/2011 00:22	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202A	10/20/2011 05:49	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 14:14	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11290102201B	10/17/2011 20:44	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201B	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202A	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11290102201B	10/17/2011 16:45	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11294039401B	10/21/2011 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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

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

Sample Description: EB-SA7-SB-101111 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101111

LLI Sample # WW 6434477
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 14:30

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6610 SDG#: DE266-10EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	3.07	0.483	0.965		1
The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.							
N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result.							

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11286WAH026	10/17/2011 18:15	Matthew S Woods	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11286WAH026	10/14/2011 03:10	David V Hershey Jr	1

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

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

Sample Description: TB-101111 Water
SSFL Area IV Collocated Soil Sampling
TB-101111

LLI Sample # WW 6434478
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:00

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6611 SDG#: DE266-11TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	1.16	0.499	0.997		1
The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.							
N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result.							

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11286WAH026	10/17/2011 18:34	Matthew S Woods	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11286WAH026	10/14/2011 03:10	David V Hershey Jr	1

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

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



Analysis Report

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

Page 1 of 1

Sample Description: TB-101111 Sand
SSFL Area IV Collocated Soil Sampling
TB-101111

LLI Sample # SW 6434479
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:00

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6612 SDG#: DE266-12TB

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	16.6 U	16.6	33.1		1
Wet Chemistry	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	0.50 U	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11285SLG026	10/18/2011 00:37	Matthew S Woods	1
11630	NDMA Soil Microwave	SW-846 3546	1	11285SLG026	10/13/2011 06:25	Roman Kuropatkin	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11291162401B	10/18/2011 21:20	Scott W Freisher	1

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

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



Analysis Report

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

Page 1 of 1

Sample Description: TB-101111 Water
SSFL Area IV Collocated Soil Sampling
TB-101111

LLI Sample # WW 6434480
LLI Group # 1270785
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:00

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

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6613 SDG#: DE266-13TB*

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	11285A20A	10/13/2011 16:45	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	11285A20A	10/13/2011 16:45	Marie D John	1

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

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

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

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11285SLG026 N-Nitrosodimethylamine	Sample number(s): 6434468, 6434470, 6434472-6434476, 6434479 16.7 U	16.7	33.3	ng/kg	98		70-130		
Batch number: 11286WAH026 N-Nitrosodimethylamine	Sample number(s): 6434477-6434478 1.14	0.500	1.00	ng/l	98	103	70-130	5	30
Batch number: 11290SLE026 Acenaphthene	Sample number(s): 6434468-6434476 17 U	17.	170	ug/kg	98		76-111		
Aniline	170 U	170.	500	ug/kg	74		20-115		
Anthracene	17 U	17.	170	ug/kg	98		76-112		
Benzidine	1,200 U	1,200.	3,300	ug/kg	43		15-121		
Benzo(a)anthracene	17 U	17.	170	ug/kg	98		73-112		
Benzo(a)pyrene	17 U	17.	170	ug/kg	100		65-124		
Benzo(b)fluoranthene	17 U	17.	170	ug/kg	101		61-127		
Benzo(g,h,i)perylene	17 U	17.	170	ug/kg	94		60-125		
Benzo(k)fluoranthene	17 U	17.	170	ug/kg	100		67-125		
Benzoic acid	170 U	170.	500	ug/kg	63		62-113		
Benzyl alcohol	170 U	170.	500	ug/kg	113*		68-111		
4-Bromophenyl-phenylether	17 U	17.	170	ug/kg	97		73-114		
Butylbenzylphthalate	17 U	17.	170	ug/kg	92		75-115		
Di-n-butylphthalate	17 U	17.	170	ug/kg	94		79-112		
Carbazole	17 U	17.	170	ug/kg	95		77-113		
4-Chloro-3-methylphenol	33 U	33.	170	ug/kg	112		74-119		
4-Chloroaniline	67 U	67.	170	ug/kg	47		10-110		
bis(2-Chloroethoxy)methane	17 U	17.	170	ug/kg	105		70-118		
bis(2-Chloroethyl)ether	17 U	17.	170	ug/kg	107*		70-104		
bis(2-Chloroisopropyl)ether	17 U	17.	170	ug/kg	107		62-115		
2-Chloronaphthalene	17 U	17.	170	ug/kg	71		49-128		
2-Chlorophenol	17 U	17.	170	ug/kg	109		72-112		
4-Chlorophenyl-phenylether	33 U	33.	170	ug/kg	104		74-115		
Chrysene	17 U	17.	170	ug/kg	96		76-113		
Dibenz(a,h)anthracene	17 U	17.	170	ug/kg	100		61-126		
Dibenzofuran	17 U	17.	170	ug/kg	98		74-116		
1,2-Dichlorobenzene	17 U	17.	170	ug/kg	91		74-99		
1,3-Dichlorobenzene	17 U	17.	170	ug/kg	90		70-98		
1,4-Dichlorobenzene	17 U	17.	170	ug/kg	91		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	42		10-116		
2,4-Dichlorophenol	17 U	17.	170	ug/kg	107		75-111		
Diethylphthalate	17 U	17.	170	ug/kg	99		76-111		
2,4-Dimethylphenol	33 U	33.	170	ug/kg	109		72-111		
3,5-Dimethylphenol	33 U	33.	170	ug/kg	118		83-120		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Dimethylphthalate	17	17.	170	ug/kg	100		77-109		
4,6-Dinitro-2-methylphenol	170	170.	500	ug/kg	41*		46-120		
2,4-Dinitrophenol	330	330.	1,000	ug/kg	22		18-133		
2,4-Dinitrotoluene	33	33.	170	ug/kg	109		73-115		
2,6-Dinitrotoluene	17	17.	170	ug/kg	106		79-115		
1,2-Diphenylhydrazine	17	17.	170	ug/kg	103		71-125		
bis(2-Ethylhexyl)phthalate	17	17.	330	ug/kg	96		75-117		
Fluoranthene	17	17.	170	ug/kg	102		78-116		
Fluorene	17	17.	170	ug/kg	101		75-116		
Hexachlorobenzene	17	17.	170	ug/kg	100		73-119		
Hexachlorobutadiene	67	67.	170	ug/kg	93		65-117		
Hexachlorocyclopentadiene	170	170.	500	ug/kg	92		46-115		
Hexachloroethane	17	17.	170	ug/kg	90		61-109		
Indeno(1,2,3-cd)pyrene	17	17.	170	ug/kg	97		64-119		
Isophorone	17	17.	170	ug/kg	109		69-110		
2-Methylphenol	33	33.	170	ug/kg	116*		66-110		
4-Methylphenol	33	33.	170	ug/kg	113		66-117		
2-Nitroaniline	17	17.	170	ug/kg	107		78-116		
3-Nitroaniline	33	33.	170	ug/kg	99		62-109		
4-Nitroaniline	67	67.	170	ug/kg	75		49-98		
Nitrobenzene	17	17.	170	ug/kg	110		66-119		
2-Nitrophenol	17	17.	170	ug/kg	105		76-111		
4-Nitrophenol	170	170.	500	ug/kg	89		56-118		
N-Nitroso-di-n-propylamine	17	17.	170	ug/kg	109*		63-107		
N-Nitrosodiphenylamine	17	17.	170	ug/kg	96		67-141		
Di-n-octylphthalate	17	17.	170	ug/kg	101		62-137		
Pentachlorophenol	170	170.	500	ug/kg	86		51-117		
Phenanthrene	17	17.	170	ug/kg	93		77-113		
Phenol	17	17.	170	ug/kg	112		58-112		
Pyrene	17	17.	170	ug/kg	95		75-115		
Tetralin	170	170.	170	ug/kg					
1,2,4-Trichlorobenzene	17	17.	170	ug/kg	95		73-108		
2,4,5-Trichlorophenol	33	33.	170	ug/kg	104		76-107		
2,4,6-Trichlorophenol	33	33.	170	ug/kg	102		78-111		
Batch number: 11298SLA026	Sample number(s): 6434468-6434476								
Acenaphthene	0.67	0.67	1.7	ug/kg	102		63-120		
Acenaphthylene	0.33	0.33	1.7	ug/kg	94		60-120		
Anthracene	0.33	0.33	1.7	ug/kg	100		73-113		
Benzo(a)anthracene	0.67	0.67	1.7	ug/kg	99		74-120		
Benzo(a)pyrene	0.67	0.67	1.7	ug/kg	98		58-129		
Benzo(b)fluoranthene	0.67	0.67	1.7	ug/kg	104		63-143		
Benzo(g,h,i)perylene	0.67	0.67	1.7	ug/kg	100		66-150		
Benzo(k)fluoranthene	0.67	0.67	1.7	ug/kg	103		54-142		
Butylbenzylphthalate	6.0	6.0	18	ug/kg	110		65-131		
Di-n-butylphthalate	6.0	6.0	18	ug/kg	124		75-137		
Chrysene	0.33	0.33	1.7	ug/kg	101		73-114		
Dibenz(a,h)anthracene	0.67	0.67	1.7	ug/kg	104		53-138		
Diethylphthalate	6.0	6.0	18	ug/kg	110		68-125		
Dimethylphthalate	6.0	6.0	18	ug/kg	105		79-121		
Bis(2-Ethylhexyl)phthalate	6.0	6.0	18	ug/kg	129		67-143		
Fluoranthene	0.67	0.67	1.7	ug/kg	102		64-120		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

<u>Analysis Name</u>	<u>Blank Result</u>		<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Fluorene	0.67 U		0.67	1.7	ug/kg	103		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U		0.67	1.7	ug/kg	102		56-134		
1-Methylnaphthalene	0.67 U		0.67	1.7	ug/kg	93		72-120		
2-Methylnaphthalene	0.67 U		0.67	1.7	ug/kg	91		62-120		
Naphthalene	0.67 U		0.67	1.7	ug/kg	95		67-120		
N-Nitrosodimethylamine	0.67 U		0.67	1.7	ug/kg	94		55-118		
Di-n-octylphthalate	6.0 U		6.0	18	ug/kg	110		68-162		
Phenanthrene	0.67 U		0.67	1.7	ug/kg	96		75-120		
Pyrene	0.67 U		0.67	1.7	ug/kg	99		72-119		
Batch number: 11285A20A	Sample number(s): 6434480									
TPH-GRO S.CA water C5-C12	20 U		20.	50	ug/l	100	100	75-135	0	30
Batch number: 11290B16A	Sample number(s): 6434468-6434470, 6434472, 6434474-6434475									
9a TPH by EPA 8015B Gas C5-C12	0.2 U		0.2	1.0	mg/kg	80		67-119		
Batch number: 11290B16B	Sample number(s): 6434476									
9a TPH by EPA 8015B Gas C5-C12	0.2 U		0.2	1.0	mg/kg	80		67-119		
Batch number: 112880014A	Sample number(s): 6434468, 6434470, 6434472-6434476									
4-Amino-2,6-Dinitrotoluene	60 U		60.	120	ug/kg	108		80-120		
2-Amino-4,6-Dinitrotoluene	40 U		40.	120	ug/kg	106		80-120		
2,6-Diamino-4-nitrotoluene	80 U		80.	240	ug/kg	85	85	54-134	0	30
2,4-Diamino-6-nitrotoluene	80 U		80.	240	ug/kg	84	85	54-134	0	30
1,3-Dinitrobenzene	40 U		40.	120	ug/kg	109		51-171		
2,4-Dinitrotoluene	40 U		40.	120	ug/kg	100		72-135		
2,6-Dinitrotoluene	40 U		40.	120	ug/kg	106		80-120		
HMX	100 U		100.	300	ug/kg	91		74-130		
Nitrobenzene	40 U		40.	120	ug/kg	103		80-120		
Nitroglycerin	800 U		800.	2,400	ug/kg	86		80-120		
2-Nitrotoluene	80 U		80.	120	ug/kg	101		78-128		
3-Nitrotoluene	100 U		100.	120	ug/kg	107		73-127		
4-Nitrotoluene	80 U		80.	120	ug/kg	100		80-120		
PETN	800 U		800.	2,400	ug/kg	101		80-120		
RDX	50 U		50.	120	ug/kg	101		75-131		
Tetryl	61 U		61.	120	ug/kg	97		70-168		
1,3,5-Trinitrobenzene	40 U		40.	120	ug/kg	103		77-137		
2,4,6-Trinitrotoluene	40 U		40.	120	ug/kg	107		80-120		
Batch number: 112860003A	Sample number(s): 6434468, 6434470, 6434472-6434476									
20a Formaldehyde 8315A	600 U		600.	1,500	ug/kg	101		80-126		
Batch number: 112860020A	Sample number(s): 6434468-6434476									
Aroclor 5432	1.0 U		1.0	3.3	ug/kg					
Aroclor 5442	1.0 U		1.0	3.3	ug/kg	67	79	36-106	16	30
Aroclor 5460	1.0 U		1.0	3.3	ug/kg					
PCB-1016	0.33 U		0.33	1.7	ug/kg	82		72-120		
PCB-1221	0.33 U		0.33	1.7	ug/kg					
PCB-1232	0.33 U		0.33	1.7	ug/kg					
PCB-1242	0.33 U		0.33	1.7	ug/kg					
PCB-1248	0.33 U		0.33	1.7	ug/kg					
PCB-1254	0.33 U		0.33	1.7	ug/kg					
PCB-1260	0.39 U		0.39	1.7	ug/kg	97		65-137		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 112850037A	Sample number(s): 6434468-6434470, 6434472-6434476								
Ethanol	100 U	100.	500	ug/kg	89		71-129		
Isopropanol	100 U	100.	500	ug/kg	89		75-125		
Methanol	100 U	100.	500	ug/kg	86		68-129		
Batch number: 112870018A	Sample number(s): 6434468-6434470, 6434472-6434476								
Diethylene glycol	5.0 U	5.0	10	mg/kg	94		75-125		
Ethylene glycol	5.0 U	5.0	10	mg/kg	95		53-149		
Propylene glycol	5.0 U	5.0	10	mg/kg	84		67-131		
Batch number: 112860009A	Sample number(s): 6434468-6434470, 6434472-6434476								
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	96		70-123		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	99		75-128		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	100		64-134		
EFH (C30 - C40)	0.40 U	0.40	1.2	mg/kg	84		65-128		
EFH (C8-C11)	0.40 U	0.40	1.2	mg/kg	85		49-107		
Batch number: 112870007A	Sample number(s): 6434468-6434470, 6434472-6434476								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	102		64-111		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	107		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	100		69-109		
Batch number: 112851026001A	Sample number(s): 6434468-6434476								
Antimony	0.0740 U	0.0740	0.200	mg/kg	139		40-227		
Arsenic	0.0800 U	0.0800	0.400	mg/kg	103		83-111		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	105		84-112		
Cadmium	0.0440 U	0.0440	0.100	mg/kg	105		83-111		
Chromium	0.120 U	0.120	0.400	mg/kg	114		77-123		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	110		85-114		
Copper	0.0800 U	0.0800	0.400	mg/kg	104		81-110		
Lead	0.0102 U	0.0102	0.200	mg/kg	104		84-112		
Nickel	0.100 U	0.100	0.400	mg/kg	102		81-110		
Silver	0.0142 U	0.0142	0.100	mg/kg	106		83-112		
Thallium	0.0300 U	0.0300	0.100	mg/kg	103		82-112		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	107		76-110		
Zinc	0.560 U	0.560	3.00	mg/kg	102		82-110		
Batch number: 112851026001B	Sample number(s): 6434468-6434476								
Selenium	0.0580 U	0.0580	0.400	mg/kg	105		79-110		
Batch number: 112851026001C	Sample number(s): 6434468-6434476								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	106		80-110		
Batch number: 112851026001D	Sample number(s): 6434468-6434476								
Barium	0.106 U	0.106	0.400	mg/kg	106		83-110		
Batch number: 112855708001	Sample number(s): 6434468-6434476								
Aluminum	6.05 U	6.05	20.0	mg/kg	94		40-127		
Boron	0.599 J	0.360	5.00	mg/kg	108		83-110		
Calcium	13.1 J	2.50	20.0	mg/kg	107		81-110		
Iron	2.73 J	2.61	20.0	mg/kg	102		47-129		
Lithium	0.62 U	0.62	2.0	mg/kg	102		80-120		

*- Outside of specification

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Magnesium	0.891 J	0.440	10.0	mg/kg	99		63-116		
Manganese	0.0360 U	0.0360	0.500	mg/kg	107		85-116		
Phosphorus	1.39 J	0.350	10.0	mg/kg	107		80-120		
Potassium	11.3 U	11.3	50.0	mg/kg	108		71-110		
Sodium	5.95 U	5.95	100	mg/kg	108		76-110		
Strontium	0.0750 J	0.0250	0.500	mg/kg	108		84-110		
Tin	1.44 J	0.320	10.0	mg/kg	105		86-120		
Titanium	0.0710 U	0.0710	1.00	mg/kg	96		80-120		
Zirconium	0.460 U	0.460	5.00	mg/kg	103		80-120		
Batch number: 112855711001	Sample number(s): 6434468-6434476								
Mercury	0.0068 U	0.0068	0.0968	mg/kg	100		83-119		
Batch number: 11290102201A	Sample number(s): 6434468-6434470								
16a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	100		80-120		
Batch number: 11290102201B	Sample number(s): 6434472-6434476								
16a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	100		80-120		
Batch number: 11291243201A	Sample number(s): 6434468-6434476								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	81		80-120		
Batch number: 11292621202A	Sample number(s): 6434468-6434476								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	111		85-115		
Batch number: 11297495201A	Sample number(s): 6434468-6434474								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	102		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	103		90-110		
Batch number: 11297495201B	Sample number(s): 6434475-6434476								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	102		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	103		90-110		
Batch number: 11294039401A	Sample number(s): 6434468-6434473								
17a pH by 9045C					100		95-105		
Batch number: 11294039401B	Sample number(s): 6434474-6434476								
17a pH by 9045C					100		95-105		
Batch number: 11291162401B	Sample number(s): 6434469, 6434471, 6434479								
Moisture Content by 160.3					100		80-120		
Batch number: 11298162401A	Sample number(s): 6434468, 6434470, 6434472-6434476								
Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11285SLG026	Sample number(s): 6434468, 6434470, 6434472-6434476, 6434479 UNSPK: P432178								
N-Nitrosodimethylamine	89	105	70-130	16	30				

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Sample Matrix Quality Control

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

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11290SLE026 Sample number(s): 6434468-6434476 UNSPK: P435690									
Acenaphthene	98	97	75-115	1	30				
Aniline	72	71	18-116	2	30				
Anthracene	101	97	75-115	4	30				
Benizidine	38	37	35-141	4	30				
Benzo(a)anthracene	100	97	65-122	3	30				
Benzo(a)pyrene	103	99	57-126	4	30				
Benzo(b)fluoranthene	108	100	59-125	8	30				
Benzo(g,h,i)perylene	110	104	59-127	5	30				
Benzo(k)fluoranthene	94	93	56-132	2	30				
Benzoic acid	0*	0*	10-173	0	30				
Benzy alcohol	106	103	67-115	2	30				
4-Bromophenyl-phenylether	106	102	67-129	4	30				
Butylbenzylphthalate	99	95	73-134	4	30				
Di-n-butylphthalate	97	93	67-123	4	30				
Carbazole	96	93	64-120	3	30				
4-Chloro-3-methylphenol	110	109	62-122	1	30				
4-Chloroaniline	62	68	13-107	9	30				
bis(2-Chloroethoxy)methane	103	102	75-104	1	30				
bis(2-Chloroethyl)ether	100	96	60-116	4	30				
bis(2-Chloroisopropyl)ether	101	97	55-142	4	30				
2-Chloronaphthalene	81	79	50-141	3	30				
2-Chlorophenol	101	101	73-121	1	30				
4-Chlorophenyl-phenylether	103	102	80-109	2	30				
Chrysene	95	92	62-128	4	30				
Dibenz(a,h)anthracene	114	108	65-125	5	30				
Dibenzofuran	98	97	71-112	2	30				
1,2-Dichlorobenzene	86	85	66-108	1	30				
1,3-Dichlorobenzene	84	82	63-109	3	30				
1,4-Dichlorobenzene	85	83	58-108	3	30				
3,3'-Dichlorobenzidine	55	59	28-109	7	30				
2,4-Dichlorophenol	101	104	66-123	3	30				
Diethylphthalate	96	94	66-118	2	30				
2,4-Dimethylphenol	106	105	68-118	2	30				
3,5-Dimethylphenol	118	118	71-127	0	30				
Dimethylphthalate	98	95	64-118	2	30				
4,6-Dinitro-2-methylphenol	10*	12	11-126	14	30				
2,4-Dinitrophenol	0*	0*	20-143	0	30				
2,4-Dinitrotoluene	103	101	56-129	2	30				
2,6-Dinitrotoluene	103	102	69-123	1	30				
1,2-Diphenylhydrazine	109	105	71-129	3	30				
bis(2-Ethylhexyl)phthalate	102	100	63-122	2	30				
Fluoranthene	99	97	73-112	2	30				
Fluorene	102	100	63-121	1	30				
Hexachlorobenzene	108	104	77-114	4	30				
Hexachlorobutadiene	96	95	62-120	1	30				
Hexachlorocyclopentadiene	47	48	10-153	3	30				
Hexachloroethane	84	81	57-109	3	30				
Indeno(1,2,3-cd)pyrene	112	107	61-126	4	30				
Isophorone	108*	107*	73-102	1	30				
2-Methylphenol	108	106	75-111	2	30				
4-Methylphenol	107	104	59-123	2	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Sample Matrix Quality Control

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

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Nitroaniline	106	108	67-125	2	30				
3-Nitroaniline	97	96	59-122	1	30				
4-Nitroaniline	79	76	41-109	4	30				
Nitrobenzene	109	108	57-125	1	30				
2-Nitrophenol	89	104	56-127	16	30				
4-Nitrophenol	66	78	37-129	17	30				
N-Nitroso-di-n-propylamine	102	100	60-116	3	30				
N-Nitrosodiphenylamine	101	96	71-122	5	30				
Di-n-octylphthalate	105	100	56-126	4	30				
Pentachlorophenol	24*	41	28-127	52*	30				
Phenanthrene	97	93	65-125	4	30				
Phenol	105	102	58-126	3	30				
Pyrene	99	95	74-126	3	30				
1,2,4-Trichlorobenzene	96	97	72-115	0	30				
2,4,5-Trichlorophenol	92	102	58-129	9	30				
2,4,6-Trichlorophenol	85	100	56-134	16	30				
Batch number: 11298SLA026 Sample number(s): 6434468-6434476 UNSPK: P437195									
Acenaphthene	93	100	63-105	7	30				
Acenaphthylene	90	97	67-114	7	30				
Anthracene	94	102	73-115	8	30				
Benzo(a)anthracene	95	101	59-128	6	30				
Benzo(a)pyrene	93	99	58-142	6	30				
Benzo(b)fluoranthene	98	105	54-163	7	30				
Benzo(g,h,i)perylene	78	85	33-141	9	30				
Benzo(k)fluoranthene	97	103	57-153	5	30				
Butylbenzylphthalate	107	120	57-173	11	30				
Di-n-butylphthalate	112	159*	65-148	34*	30				
Chrysene	94	101	67-123	7	30				
Dibenz(a,h)anthracene	85	94	22-133	10	30				
Diethylphthalate	102	126	70-136	21	30				
Dimethylphthalate	100	107	74-118	7	30				
Bis(2-Ethylhexyl)phthalate	119	100	39-167	13	30				
Fluoranthene	97	104	51-149	7	30				
Fluorene	97	104	66-122	7	30				
Indeno(1,2,3-cd)pyrene	84	92	21-143	9	30				
1-Methylnaphthalene	87	94	72-123	8	30				
2-Methylnaphthalene	85	92	64-103	7	30				
Naphthalene	90	95	61-102	5	30				
N-Nitrosodimethylamine	88	94	48-113	7	30				
Di-n-octylphthalate	139	113	40-192	21	30				
Phenanthrene	90	98	62-122	8	30				
Pyrene	94	100	51-131	6	30				
Batch number: 11290B16A Sample number(s): 6434468-6434470, 6434472, 6434474-6434475 UNSPK: P435690									
9a TPH by EPA 8015B Gas C5-C12	73	65	39-118	7	30				
Batch number: 11290B16B Sample number(s): 6434476 UNSPK: P435690									
9a TPH by EPA 8015B Gas C5-C12	73	65	39-118	7	30				
Batch number: 112880014A Sample number(s): 6434468, 6434470, 6434472-6434476 UNSPK: P435690									
4-Amino-2,6-Dinitrotoluene	109	110	80-127	1	50				
2-Amino-4,6-Dinitrotoluene	109	107	80-137	1	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Sample Matrix Quality Control

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

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,3-Dinitrobenzene	112	111	38-166	1	50				
2,4-Dinitrotoluene	102	102	80-131	0	50				
2,6-Dinitrotoluene	107	105	80-127	1	50				
HMX	94	94	63-128	0	50				
Nitrobenzene	107	105	80-125	2	50				
Nitroglycerin	100	99	80-120	1	50				
2-Nitrotoluene	104	102	80-122	2	50				
3-Nitrotoluene	110	109	72-119	2	50				
4-Nitrotoluene	103	102	80-125	1	50				
PETN	109	108	80-121	1	50				
RDX	100	99	75-129	1	50				
Tetryl	93	92	55-174	1	50				
1,3,5-Trinitrobenzene	105	103	82-126	2	50				
2,4,6-Trinitrotoluene	109	108	82-130	1	50				
Batch number: 112860003A	Sample number(s): 6434468, 6434470, 6434472-6434476 UNSPK: P433414								
20a Formaldehyde 8315A	94	108	80-120	14	50				
Batch number: 112860020A	Sample number(s): 6434468-6434476 UNSPK: P431135								
PCB-1016	91	95	29-146	4	50				
PCB-1260	92	96	39-149	4	50				
Batch number: 112850037A	Sample number(s): 6434468-6434470, 6434472-6434476 UNSPK: 6434468								
Ethanol	43*	70	48-130	48*	20				
Isopropanol	39	66	12-149	51*	20				
Methanol	43	70	43-138	49*	20				
Batch number: 112870018A	Sample number(s): 6434468-6434470, 6434472-6434476 UNSPK: 6434470								
Diethylene glycol	9*	8*	59-109	5	20				
Ethylene glycol	43*	42*	63-107	3	20				
Propylene glycol	52*	50*	63-107	3	20				
Batch number: 112860009A	Sample number(s): 6434468-6434470, 6434472-6434476 UNSPK: P430028								
EFH (C12-C14)	85	85	49-123	0	20				
EFH (C15-C20)	106	112	49-123	5	20				
EFH (C21-C30)	111	135*	49-123	12	20				
EFH (C30 - C40)	171*	251*	49-123	19	20				
EFH (C8-C11)	68	67	49-123	2	20				
Batch number: 112870007A	Sample number(s): 6434468-6434470, 6434472-6434476 UNSPK: P435690								
m-Terphenyl	93	95	75-125	1	20				
o-Terphenyl	107	107	75-125	0	20				
p-Terphenyl	85	90	75-125	6	20				
Batch number: 112851026001A	Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412								
Antimony	38*	33*	75-125	6	20	0.388	0.234	49* (1)	20
Arsenic	-241	-213	75-125	6	20	13.6	6.97	65*	20
	(2)	(2)							
Beryllium	115	104	75-125	5	20	0.713	0.610	16	20
Cadmium	121	123	75-125	1	20	0.286	0.201	35* (1)	20
Chromium	106	86	75-125	5	20	28.7	25.5	12	20
Cobalt	131*	123	75-125	5	20	11.1	8.64	25*	20
Copper	95	71*	75-125	8	20	21.5	16.6	26*	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Sample Matrix Quality Control

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

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Lead	83	124	75-125	9	20	11.0	11.2	2	20
Nickel	129*	80	75-125	15	20	22.5	18.8	18	20
Silver	129*	129*	75-125	0	20	0.0877 J	0.0777 J	12 (1)	20
Thallium	111	113	75-125	1	20	0.433	0.432	0 (1)	20
Vanadium	44 (2)	34 (2)	75-125	2	20	56.1	47.1	17	20
Zinc	63 (2)	69 (2)	75-125	1	20	90.8	78.2	15	20
Batch number: 112851026001B	Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412								
Selenium	110	115	75-125	4	20	0.556	0.403	32* (1)	20
Batch number: 112851026001C	Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412								
Molybdenum	125	123	75-125	1	20	1.45	0.799	58*	20
Batch number: 112851026001D	Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412								
Barium	246 (2)	61 (2)	75-125	12	20	131	121	8	20
Batch number: 112855708001	Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412								
Aluminum	575 (2)	1076 (2)	75-125	6	20	14,300	15,100	5	20
Boron	103	102	84-115	1	20	0.356 U	0.356 U	0 (1)	20
Calcium	127 (2)	90 (2)	75-125	3	20	5,290	5,130	3	20
Iron	-29 (2)	1606 (2)	75-125	6	20	24,700	30,300	21*	20
Lithium	99	101	82-114	2	20	35.1	39.5	12	20
Magnesium	172 (2)	445 (2)	75-125	8	20	6,590	7,710	16	20
Manganese	67 (2)	66 (2)	75-125	0	20	362	322	11	20
Phosphorus	141 (2)	125 (2)	75-125	3	20	496	571	14	20
Potassium	116	143*	75-125	6	20	3,500	3,700	5	20
Sodium	99	99	75-125	0	20	112	122	9 (1)	20
Strontium	100	99	75-115	1	20	16.5	17.2	4	20
Tin	88	90	80-110	1	20	3.03 J	3.15 J	4 (1)	20
Titanium	261 (2)	339 (2)	75-125	5	20	1,400	1,580	12	20
Zirconium	99	99	81-110	0	20	2.38 J	2.88 J	19 (1)	20
Batch number: 112855711001	Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412								
Mercury	93	97	65-135	4	20	0.0237 J	0.0066 U	200* (1)	20
Batch number: 11290102201A	Sample number(s): 6434468-6434470 UNSPK: P431140 BKG: P431140								
16a Cyanide by 9012B	101		75-125			0.18 U	0.18 U	0 (1)	20
Batch number: 11290102201B	Sample number(s): 6434472-6434476 UNSPK: 6434472 BKG: 6434472								
16a Cyanide by 9012B	100		75-125			0.17 U	0.18 U	0 (1)	20
Batch number: 11291243201A	Sample number(s): 6434468-6434476 UNSPK: P435690 BKG: P435690								
3a Cr VI by EPA 7199	91		75-125			0.20 U	0.20 U	0 (1)	20
Batch number: 11292621202A	Sample number(s): 6434468-6434476 UNSPK: 6434468 BKG: 6434468								
7a Perchlorate EPA 314.0	109		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11297495201A	Sample number(s): 6434468-6434474 UNSPK: P433412 BKG: P433412								
11a Anions by 300.0 - Fluoride	79*		80-120			2.0	2.0	3 (1)	20
11a Anions by 300.0 - Nitrate	97		80-120			2.1	2.0	3 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11297495201B	Sample number(s): 6434475-6434476 UNSPK: P435690 BKG: P435690								
11a Anions by 300.0 - Fluoride	76*		80-120			2.1	1.9	11 (1)	20
11a Anions by 300.0 - Nitrate	95		80-120			0.98 J	0.89 J	9 (1)	20
Batch number: 11294039401A	Sample number(s): 6434468-6434473 BKG: P433413								
17a pH by 9045C						6.81	6.92	2	3
Batch number: 11294039401B	Sample number(s): 6434474-6434476 BKG: 6434476								
17a pH by 9045C						7.86	7.87	0	3
Batch number: 11291162401B	Sample number(s): 6434469,6434471,6434479 BKG: P431141								
Moisture Content by 160.3						4.4	4.3	2	20
Batch number: 11298162401A	Sample number(s): 6434468,6434470,6434472-6434476 BKG: P435690								
Moisture Content by 160.3						2.2	2.3	4 (1)	20

Surrogate Quality Control

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

Analysis Name: 21a NDMA by 1625C
Batch number: 11285SLG026
N-Nitrosodimethylamine-
d6

6434468	132
6434470	126
6434472	131
6434473	145
6434474	124
6434475	109
6434476	104
6434479	127
Blank	175*
LCS	182*
MS	180*
MSD	147

Limits: 50-150

Analysis Name: 21b. NDMA in Water
Batch number: 11286WAH026
N-Nitrosodimethylamine-
d6

6434477	320*
6434478	171*
Blank	153*
LCS	148

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Surrogate Quality Control

LCSD 160*

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 11290SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6434468	99	101	89	97	86	88
6434469	104	105	106	101	87	88
6434470	105	102	105	95	85	88
6434471	106	104	99	97	86	85
6434472	98	97	102	97	87	89
6434473	107	105	95	98	89	89
6434474	105	105	93	99	89	86
6434475	101	103	94	99	89	87
6434476	100	101	93	95	86	86
Blank	94	95	94	96	87	87
LCS	110	109	106	100	88	83
MS	104	102	79	101	88	89
MSD	103	103	92	101	88	87
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM

Batch number: 11298SLA026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6434468	90	86	91
6434469	92	85	93
6434470	92	85	91
6434471	91	84	86
6434472	96	86	78
6434473	112	87	78
6434474	100	97	88
6434475	80	78	70
6434476	90	82	73
Blank	105	101	110
LCS	100	91	97
MS	94	86	91
MSD	100	91	97
Limits:	40-130	45-130	45-135

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12

Batch number: 11285A20A

Trifluorotoluene-F

6434480	87
Blank	88
LCS	113
LCSD	115

Limits: 63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12

Batch number: 11290B16A

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Surrogate Quality Control

Trifluorotoluene-F

6434468	78
6434469	86
6434470	88
6434472	87
6434474	96
6434475	84
Blank	84
LCS	92
MS	96
MSD	92

Limits: 61-122

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 11290B16B
Trifluorotoluene-F

6434476	86
Blank	94
LCS	92
MS	96
MSD	92

Limits: 61-122

Analysis Name: 20a Formaldehyde 8315A
Batch number: 112860003A
Butyraldehyde

6434468	108
6434470	113
6434472	118
6434473	98
6434474	103
6434475	100
6434476	106
Blank	117
LCS	103
MS	106
MSD	95

Limits: 64-126

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 112860020A

Tetrachloro-m-xylene

Decachlorobiphenyl

6434468	84	93
6434469	93	110
6434470	99	113
6434471	95	71
6434472	92	80
6434473	93	81
6434474	79	60
6434475	87	71

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Surrogate Quality Control

6434476	108	88
Blank	98	106
LCS	92	102
LCSD	98	106
MS	101	98
MSD	101	97

Limits: 53-139 45-120

Analysis Name: 15a Energetics by 8330A
Batch number: 112880014A
2-Nitro-m-xylene

6434468	123
6434470	120
6434472	123
6434473	130
6434474	127
6434475	124
6434476	124
Blank	118
LCS	112
LCSD	129
MS	116
MSD	113

Limits: 80-146

Analysis Name: 18a Alcohols by 8015B
Batch number: 112850037A
Acetone

6434468	75
6434469	52
6434470	75
6434472	81
6434473	59
6434474	60
6434475	58
6434476	81
Blank	89
LCS	85
MS	34*
MSD	61

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 112860009A
Chlorobenzene Orthoterphenyl

6434468	74	84
6434469	74	87
6434470	82	89
6434472	82	89
6434473	79	87
6434474	85	88

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Surrogate Quality Control

6434475	85	89
6434476	83	86
Blank	88	90
LCS	79	90
MS	80	86
MSD	77	87

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B
Batch number: 112870007A
n-Triacontane-d62

6434468	77
6434469	79
6434470	78
6434472	83
6434473	80
6434474	148
6434475	78
6434476	87
Blank	76
LCS	76
MS	73
MSD	72

Limits: 19-152

Analysis Name: 19a Glycols by 8015B
Batch number: 112870018A
Tetramethylene glycol

6434468	74
6434469	74
6434470	74
6434472	74
6434473	74
6434474	74
6434475	72
6434476	73
Blank	84
LCS	87
MS	76
MSD	74

Limits: 29-137

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

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

acct #13013 Cp#1370735

Sample# 6434468-80

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.																											
Sample Signatures:																											
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 60100/208&7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCB/PCP's EPA 8062	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 8850 (10%)	TPH-GRO EPA 8015B \$	**TPH-EFH EPA 8015B Mod	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**th-NDMA EPA 1625C	**Emergenics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	**Dowanol EPA 8270		
SL-265-SA6-SB-4.5	10.11.11	0843	SOIL	NONE	2-Encores										X												
SL-265-SA6-SB-4.0-5.0	10.11.11	0847	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X			
SL-147-SA7-SB-1.5	10.11.11	1120	SOIL	NONE	2-Encores										X												
SL-147-SA7-SB-1.0-2.0	10.11.11	1122	SOIL	NONE	3-16 oz Jars	X	X	X	X	X	X	X	X		X					X	X	X	X				
SL-155-SA7-SB-2.0	10.11.11	1228	SOIL	NONE	2-Encores										X												
SL-155-SA7-SB-1.5-2.5	10.11.11	1232	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X				
SL-265-SA6-SB-4.5	10.11.11	0843	SOIL	NONE	2-Encores										X												
SL-265-SA6-SB-4.0-5.0	10.11.11	0847	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X				
SL-009-SA3-SB-4.0-5.0	10.11.11	1505	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X														
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																							
		10/11/2011 / 1630		10/12/11 0900																							
Received by: (Signature)		Date/Time		Airbill No. (4)																							
				8767 9858 5501, 5497																							
				Laboratory: Lancaster Laboratories, Inc.																							

acct #13013 Cp #1370785 sample #6434468-80

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analytes as indicated on sample labels **Secondary Analytes as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 15 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 5 (SA5) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.																											
Samplers Signatures:																											
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020/8270/1A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCB/PCP's EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 8650 (10%)	TPH-GRO EPA 8015E \$	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Emergals EPA 830A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	**Dioxins EPA 8270		
SL-049-SA7-SB-4.5	10.11.11	1525	SOIL	NONE	1-SS Sleeve										X												
SL-049-SA7-SB-4.0-5.0	10.11.11	1525	SOIL	NONE	1-SS Sleeve			X	X																		
SL-049-SA7-SB-4.0-5.0	10.11.11	1525	SOIL	NONE	2-16 oz Jars	X	X			X	X	X	X			X	X	X	X	X	X	X	X				
SL-162-SA7-SB-0.0-1.0	10.11.11	1115	SOIL	NONE	1-SS Sleeve			X	X																		
SL-162-SA7-SB-0.0-1.0	10.11.11	1115	SOIL	NONE	2-16 oz Jars	X	X			X	X	X	X			X	X	X	X	X	X	X	X				
SL-166-SA7-SB-1.5	10.11.11	1045	SOIL	NONE	2-Encores									X													
SL-166-SA7-SB-1.0-2.0	10.11.11	1040	SOIL	NONE	1-SS Sleeve			X	X																		
SL-166-SA7-SB-1.0-2.0	10.11.11	1040	SOIL	NONE	2-16 oz Jars	X	X			X	X	X	X			X	X	X	X	X	X	X	X				
SL-167-SA7-SB-1.0	10.11.11	0930	SOIL	NONE	2-Encores									X													
SL-167-SA7-SB-0.5-1.5	10.11.11	0925	SOIL	NONE	1-SS Sleeve			X	X																		
SL-167-SA7-SB-0.5-1.5	10.11.11	0925	SOIL	NONE	2-16 oz Jars	X	X			X	X	X	X			X	X	X	X	X	X	X	X				
SL-168-SA7-SB-1.0	10.11.11	1350	SOIL	NONE	2-Encores									X													
SL-168-SA7-SB-0.5-1.5	10.11.11	1345	SOIL	NONE	1-SS Sleeve			X	X																		
SL-168-SA7-SB-0.5-1.5	10.11.11	1345	SOIL	NONE	2-16 oz Jars	X	X			X	X	X	X			X	X	X	X	X	X	X	X				
EB-SA7-SB-101111	10.11.11	1430	WATER	NONE	1-1 L Amber					X	X	X	X			X	X	X	X	X	X	X	X				
TB-101111	10.11.11	0800	WATER	NONE	1-1 L Amber												X								HGL ASTM II WATER		
TB-101111	10.11.11	0800	SOIL	NONE	1-4 oz Jar												X										
TB-101111	10.11.11	0800	WATER	NONE	2-40 mL Vials									X													
Relinquished by: (Signature)		Date/Time 10/11/2011 / 1630		Received for Laboratory by: (Signature)																				Laboratory: Lancaster Laboratories, Inc.			
Received by: (Signature)		Date/Time		At Bill No.(s) 8767 9858 5501, 5497																							

CHAIN OF CUSTODY RECORD

CDM	SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS										SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes							
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetratin under EPA Method 8270C.																																		
Samplers Signatures:																																		
SAMPLE NUMBER		DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 8010/6020B&7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCB/PCP/TCs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	*PIL-GRO EPA 8015B \$	**TPH-EFH EPA 8016B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8015A	**n-NDMA EPA 1625C	**L. nergelics LPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8016B	**Glycols EPA 8015B	**Alcohols EPA 8015B	**Covonol EPA 8270								
SL-147-SA7-SB-1.5		10.11.11	1120	SOIL	NONE	2-Encores									X																			
SL-147-SA7-SB-1.0-2.0		10.11.11	1122	SOIL	NONE	3-16 oz Jars	X	X	X	X	X	X	X	X		X					X	X	X	X										
SL-155-SA7-SB-2.0		10.11.11	1228	SOIL	NONE	2-Encores									X																			
SL-155-SA7-SB-1.5-2.5		10.11.11	1232	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X										
SL-265-SA6-SB-4.5		10.11.11	0843	SOIL	NONE	2-Encores									X																			
SL-265-SA6-SB-4.0-5.0		10.11.11	0847	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X										
SL-009-SA3-SB-4.0-5.0		10.11.11	1505	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X																				
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)													Laboratory: Lancaster Laboratories, Inc.																	
		10/11/2011 / 1630																																
Received by: (Signature)		Date/Time		Airbill No.(s)																														
				8767 9858 5501, 5497																														

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Wednesday, October 12, 2011 11:05 AM
To: Nicole Maljovec
Cc: Bloisa, Peggy
Subject: Repeated line in 10/11/11 COC

Hi Nicole

I sent you guys a COC with a repeated line, please see my corrected COC. Thanks!

Pam

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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



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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

October 31, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/12/2011
Group Number: 1270786
SDG: DX148
PO Number: 1203-004-009-AL
Release Number: TRACKING #12571
State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-265-SA6-SB-4.0-5.0 Soil	6434481
SL-147-SA7-SB-1.0-2.0 Soil	6434482
SL-155-SA7-SB-1.5-2.5 Soil	6434483
SL-009-SA3-SB-4.0-5.0 Soil	6434484
SL-049-SA7-SB-4.0-5.0 Soil	6434485
SL-162-SA7-SB-0.0-1.0 Soil	6434486
SL-166-SA7-SB-1.0-2.0 Soil	6434487
SL-167-SA7-SB-0.5-1.5 Soil	6434488

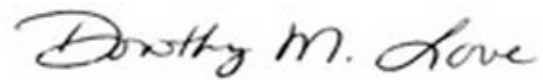
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO
ELECTRONIC COPY TO
CDM Federal Services Program
Data Package Group

Attn: Todd Burgess

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

Respectfully Submitted,



Dorothy M. Love
Group Leader



Analysis Report

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

Page 1 of 4

Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434481
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4813 SDG#: DX148-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	8.5	0.50	0.50	1

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

Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434481
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4813 SDG#: DX148-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0280 U	0.0280	1.04	1
11031	12378-PeCDD	40321-76-4	0.0256 U	0.0256	5.22	1
11031	123478-HxCDD	39227-28-6	0.0246 JQ	0.0228	5.22	1
11031	123678-HxCDD	57653-85-7	0.0662 JB	0.0211	5.22	1
11031	123789-HxCDD	19408-74-3	0.0835 JBQ	0.0211	5.22	1
11031	1234678-HpCDD	35822-46-9	0.836 JB	0.0292	5.22	1
11031	OCDD	3268-87-9	6.83 JB	0.0256	10.4	1
11031	2378-TCDF	51207-31-9	0.0481 J	0.0230	1.04	1
11031	12378-PeCDF	57117-41-6	0.0336 JB	0.0130	5.22	1
11031	23478-PeCDF	57117-31-4	0.0136 U	0.0136	5.22	1
11031	123478-HxCDF	70648-26-9	0.0509 JBQ	0.0173	5.22	1
11031	123678-HxCDF	57117-44-9	0.0370 JBQ	0.0154	5.22	1
11031	123789-HxCDF	72918-21-9	0.0179 U	0.0179	5.22	1
11031	234678-HxCDF	60851-34-5	0.0898 JBQ	0.0153	5.22	1
11031	1234678-HpCDF	67562-39-4	0.170 JB	0.0167	5.22	1
11031	1234789-HpCDF	55673-89-7	0.0550 JB	0.0256	5.22	1
11031	OCDF	39001-02-0	0.322 JB	0.0272	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	84	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	93	28 - 130
13C12-123789-HxCDD	91	28 - 130
13C12-1234678-HpCDD	97	23 - 140
13C12-OCDD	100	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	82	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434481
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4813 SDG#: DX148-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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

Page 4 of 4

Sample Description: SL-265-SA6-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434481
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4813 SDG#: DX148-13

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11293002	10/22/2011 21:15	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11293002	10/20/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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



Analysis Report

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

Page 1 of 4

Sample Description: SL-147-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434482
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4814 SDG#: DX148-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	6.3	0.50	0.50	1

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

Sample Description: SL-147-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434482
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4814 SDG#: DX148-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0378 U	0.0378	1.07	1
11031	12378-PeCDD	40321-76-4	0.0361 JQ	0.0288	5.33	1
11031	123478-HxCDD	39227-28-6	0.0236 U	0.0236	5.33	1
11031	123678-HxCDD	57653-85-7	0.262 JBQ	0.0241	5.33	1
11031	123789-HxCDD	19408-74-3	0.377 JB	0.0244	5.33	1
11031	1234678-HpCDD	35822-46-9	0.303 JBQ	0.0275	5.33	1
11031	OCDD	3268-87-9	0.495 JB	0.0248	10.7	1
11031	2378-TCDF	51207-31-9	0.0343 JQ	0.0232	1.07	1
11031	12378-PeCDF	57117-41-6	0.0394 JB	0.0147	5.33	1
11031	23478-PeCDF	57117-31-4	0.0496 JB	0.0142	5.33	1
11031	123478-HxCDF	70648-26-9	0.0494 JBQ	0.0162	5.33	1
11031	123678-HxCDF	57117-44-9	0.187 JB	0.0136	5.33	1
11031	123789-HxCDF	72918-21-9	0.122 JBQ	0.0186	5.33	1
11031	234678-HxCDF	60851-34-5	0.0351 JB	0.0143	5.33	1
11031	1234678-HpCDF	67562-39-4	0.0737 JB	0.0137	5.33	1
11031	1234789-HpCDF	55673-89-7	0.0356 JBQ	0.0247	5.33	1
11031	OCDF	39001-02-0	0.125 JBQ	0.0327	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	100	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Sample Description: SL-147-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434482
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4814 SDG#: DX148-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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

Sample Description: SL-147-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434482
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4814 SDG#: DX148-14

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11293002	10/22/2011 22:11	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11293002	10/20/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11291162401B	10/18/2011 21:20	Scott W Freisher	1



Analysis Report

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

Page 1 of 4

Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434483
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4815 SDG#: DX148-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	4.0	0.50	0.50	1

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

Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434483
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4815 SDG#: DX148-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0395 U	0.0395	1.04	1
11031	12378-PeCDD	40321-76-4	0.0300 U	0.0300	5.19	1
11031	123478-HxCDD	39227-28-6	0.0301 JQ	0.0216	5.19	1
11031	123678-HxCDD	57653-85-7	0.0334 JB	0.0220	5.19	1
11031	123789-HxCDD	19408-74-3	0.0465 JBQ	0.0216	5.19	1
11031	1234678-HpCDD	35822-46-9	0.292 JBQ	0.0217	5.19	1
11031	OCDD	3268-87-9	1.11 JB	0.0215	10.4	1
11031	2378-TCDF	51207-31-9	0.0419 JQ	0.0332	1.04	1
11031	12378-PeCDF	57117-41-6	0.0395 JBQ	0.0158	5.19	1
11031	23478-PeCDF	57117-31-4	0.0634 JBQ	0.0168	5.19	1
11031	123478-HxCDF	70648-26-9	0.0151 U	0.0151	5.19	1
11031	123678-HxCDF	57117-44-9	0.0272 JBQ	0.0129	5.19	1
11031	123789-HxCDF	72918-21-9	0.0355 JBQ	0.0160	5.19	1
11031	234678-HxCDF	60851-34-5	0.0447 JBQ	0.0130	5.19	1
11031	1234678-HpCDF	67562-39-4	0.122 JBQ	0.0114	5.19	1
11031	1234789-HpCDF	55673-89-7	0.0326 JBQ	0.0201	5.19	1
11031	OCDF	39001-02-0	0.173 JBQ	0.0278	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	96	32 - 141
13C12-123678-HxCDD	97	28 - 130
13C12-123789-HxCDD	96	28 - 130
13C12-1234678-HpCDD	107	23 - 140
13C12-OCDD	120	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	112	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	86	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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

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Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434483
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4815 SDG#: DX148-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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

Sample Description: SL-155-SA7-SB-1.5-2.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434483
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/12/2011 09:00

Suite 210

Reported: 10/31/2011 14:03

Chantilly VA 20151

X4815 SDG#: DX148-15

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11293002	10/22/2011 23:08	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11293002	10/20/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-009-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434484
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4816 SDG#: DX148-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	9.5	0.50	0.50	1

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

Sample Description: SL-009-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434484
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4816 SDG#: DX148-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0717	JQ	0.0417	1.08	1
11031	12378-PeCDD	40321-76-4	0.560	J	0.0562	5.39	1
11031	123478-HxCDD	39227-28-6	0.602	J	0.0606	5.39	1
11031	123678-HxCDD	57653-85-7	6.08	B	0.0603	5.39	1
11031	123789-HxCDD	19408-74-3	2.38	JB	0.0576	5.39	1
11031	1234678-HpCDD	35822-46-9	218	B	0.142	5.39	1
11031	OCDD	3268-87-9	2,250	B	0.160	10.8	1
11031	2378-TCDF	51207-31-9	1.34	C	0.109	1.08	1
11031	12378-PeCDF	57117-41-6	1.27	JB	0.0586	5.39	1
11031	23478-PeCDF	57117-31-4	9.79	B	0.0520	5.39	1
11031	123478-HxCDF	70648-26-9	2.11	JB	0.0465	5.39	1
11031	123678-HxCDF	57117-44-9	2.85	JB	0.0445	5.39	1
11031	123789-HxCDF	72918-21-9	0.720	JB	0.0501	5.39	1
11031	234678-HxCDF	60851-34-5	5.33	JB	0.0421	5.39	1
11031	1234678-HpCDF	67562-39-4	20.2	B	0.0383	5.39	1
11031	1234789-HpCDF	55673-89-7	1.29	JB	0.0477	5.39	1
11031	OCDF	39001-02-0	58.3	B	0.0397	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	87	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	95	32 - 141
13C12-123678-HxCDD	94	28 - 130
13C12-123789-HxCDD	92	28 - 130
13C12-1234678-HpCDD	99	23 - 140
13C12-OCDD	108	17 - 157
13C12-2378-TCDF	88	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	89	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	99	17 - 157

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-009-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434484
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/12/2011 09:00

Suite 210

Reported: 10/31/2011 14:03

Chantilly VA 20151

X4816 SDG#: DX148-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

Sample Description: SL-009-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434484
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/12/2011 09:00

Suite 210

Reported: 10/31/2011 14:03

Chantilly VA 20151

X4816 SDG#: DX148-16

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11293002	10/23/2011 00:04	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11293002	10/20/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11291162401B	10/18/2011 21:20	Scott W Freisher	1



Analysis Report

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Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434485
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4817 SDG#: DX148-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	3.9	0.50	0.50	1

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

Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434485
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4817 SDG#: DX148-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0573 JQ	0.0318	1.03	1
11031	12378-PeCDD	40321-76-4	0.258 J	0.0320	5.14	1
11031	123478-HxCDD	39227-28-6	0.171 JQ	0.0354	5.14	1
11031	123678-HxCDD	57653-85-7	0.352 JB	0.0352	5.14	1
11031	123789-HxCDD	19408-74-3	0.276 JB	0.0344	5.14	1
11031	1234678-HpCDD	35822-46-9	7.23 B	0.0433	5.14	1
11031	OCDD	3268-87-9	70.5 B	0.0492	10.3	1
11031	2378-TCDF	51207-31-9	0.114 J	0.0235	1.03	1
11031	12378-PeCDF	57117-41-6	0.336 JB	0.0170	5.14	1
11031	23478-PeCDF	57117-31-4	0.259 JBQ	0.0166	5.14	1
11031	123478-HxCDF	70648-26-9	0.186 JB	0.0246	5.14	1
11031	123678-HxCDF	57117-44-9	0.167 JB	0.0221	5.14	1
11031	123789-HxCDF	72918-21-9	0.125 JB	0.0255	5.14	1
11031	234678-HxCDF	60851-34-5	0.142 JBQ	0.0217	5.14	1
11031	1234678-HpCDF	67562-39-4	1.02 JB	0.0186	5.14	1
11031	1234789-HpCDF	55673-89-7	0.0862 JB	0.0286	5.14	1
11031	OCDF	39001-02-0	2.31 JB	0.0309	10.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	89	32 - 141
13C12-123678-HxCDD	92	28 - 130
13C12-123789-HxCDD	90	28 - 130
13C12-1234678-HpCDD	93	23 - 140
13C12-OCDD	100	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	82	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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

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Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434485
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4817 SDG#: DX148-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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

Sample Description: SL-049-SA7-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434485
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4817 SDG#: DX148-17

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11293002	10/23/2011 01:01	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11293002	10/20/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1



Analysis Report

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Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434486
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4818 SDG#: DX148-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	5.4	0.50	0.50	1

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

Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434486
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4818 SDG#: DX148-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0273 U	0.0273	1.01	1
11031	12378-PeCDD	40321-76-4	0.385 JQ	0.0332	5.05	1
11031	123478-HxCDD	39227-28-6	0.392 JQ	0.0438	5.05	1
11031	123678-HxCDD	57653-85-7	1.02 JBQ	0.0452	5.05	1
11031	123789-HxCDD	19408-74-3	0.697 JB	0.0409	5.05	1
11031	1234678-HpCDD	35822-46-9	30.2 B	0.0673	5.05	1
11031	OCDD	3268-87-9	323 B	0.0766	10.1	1
11031	2378-TCDF	51207-31-9	0.0823 J	0.0234	1.01	1
11031	12378-PeCDF	57117-41-6	0.308 JB	0.0183	5.05	1
11031	23478-PeCDF	57117-31-4	0.328 JBQ	0.0178	5.05	1
11031	123478-HxCDF	70648-26-9	0.301 JB	0.0288	5.05	1
11031	123678-HxCDF	57117-44-9	0.209 JBQ	0.0263	5.05	1
11031	123789-HxCDF	72918-21-9	0.126 JBQ	0.0279	5.05	1
11031	234678-HxCDF	60851-34-5	0.307 JBQ	0.0246	5.05	1
11031	1234678-HpCDF	67562-39-4	4.04 JB	0.0239	5.05	1
11031	1234789-HpCDF	55673-89-7	0.375 JB	0.0333	5.05	1
11031	OCDF	39001-02-0	9.98 JB	0.0310	10.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	97	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	85	17 - 157

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434486
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4818 SDG#: DX148-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

Sample Description: SL-162-SA7-SB-0.0-1.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434486
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4818 SDG#: DX148-18

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11293002	10/23/2011 05:01	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11293002	10/20/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1



Analysis Report

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Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434487
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4819 SDG#: DX148-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	4.3	0.50	0.50	1

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

Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434487
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4819 SDG#: DX148-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.116	J 0.0336	1.02	1
11031	12378-PeCDD	40321-76-4	1.76	J 0.0703	5.09	1
11031	123478-HxCDD	39227-28-6	4.14	J 0.0740	5.09	1
11031	123678-HxCDD	57653-85-7	18.3	B 0.0782	5.09	1
11031	123789-HxCDD	19408-74-3	9.20	B 0.0757	5.09	1
11031	1234678-HpCDD	35822-46-9	479	B 0.168	5.09	1
11031	OCDD	3268-87-9	4,110	EB 0.147	10.2	1
11031	2378-TCDF	51207-31-9	0.250	JQ 0.0443	1.02	1
11031	12378-PeCDF	57117-41-6	0.645	JB 0.0307	5.09	1
11031	23478-PeCDF	57117-31-4	0.861	JB 0.0329	5.09	1
11031	123478-HxCDF	70648-26-9	2.06	JB 0.0599	5.09	1
11031	123678-HxCDF	57117-44-9	2.41	JB 0.0495	5.09	1
11031	123789-HxCDF	72918-21-9	0.544	JB 0.0706	5.09	1
11031	234678-HxCDF	60851-34-5	4.65	JB 0.0527	5.09	1
11031	1234678-HpCDF	67562-39-4	56.7	B 0.0421	5.09	1
11031	1234789-HpCDF	55673-89-7	5.59	B 0.0796	5.09	1
11031	OCDF	39001-02-0	137	B 0.0571	10.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	100	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Page 3 of 4

Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434487
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4819 SDG#: DX148-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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

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Sample Description: SL-166-SA7-SB-1.0-2.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434487
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4819 SDG#: DX148-19

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11293002	10/23/2011 05:57	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11293002	10/20/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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



Analysis Report

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

Page 1 of 4

Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434488
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4820 SDG#: DX148-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1

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

Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434488
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4820 SDG#: DX148-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0256 U	0.0256	1.03	1
11031	12378-PeCDD	40321-76-4	0.450 JQ	0.0356	5.13	1
11031	123478-HxCDD	39227-28-6	0.765 J	0.0452	5.13	1
11031	123678-HxCDD	57653-85-7	2.70 JB	0.0459	5.13	1
11031	123789-HxCDD	19408-74-3	1.50 JB	0.0484	5.13	1
11031	1234678-HpCDD	35822-46-9	74.3 B	0.0821	5.13	1
11031	OCDD	3268-87-9	742 B	0.0854	10.3	1
11031	2378-TCDF	51207-31-9	0.138 JQ	0.0376	1.03	1
11031	12378-PeCDF	57117-41-6	0.199 JBQ	0.0351	5.13	1
11031	23478-PeCDF	57117-31-4	0.439 JBQ	0.0333	5.13	1
11031	123478-HxCDF	70648-26-9	0.645 JB	0.0320	5.13	1
11031	123678-HxCDF	57117-44-9	0.447 JBQ	0.0304	5.13	1
11031	123789-HxCDF	72918-21-9	0.169 JB	0.0340	5.13	1
11031	234678-HxCDF	60851-34-5	0.655 JB	0.0293	5.13	1
11031	1234678-HpCDF	67562-39-4	9.05 B	0.0286	5.13	1
11031	1234789-HpCDF	55673-89-7	0.779 JB	0.0365	5.13	1
11031	OCDF	39001-02-0	21.0 B	0.0269	10.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	89	32 - 141
13C12-123678-HxCDD	91	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	99	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	88	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434488
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

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

Submitted: 10/12/2011 09:00

Reported: 10/31/2011 14:03

X4820 SDG#: DX148-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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

Sample Description: SL-167-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434488
LLI Group # 1270786
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/12/2011 09:00

Suite 210

Reported: 10/31/2011 14:03

Chantilly VA 20151

X4820 SDG#: DX148-20*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11293002	10/23/2011 06:54	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11293002	10/20/2011 12:30	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/31/11 at 02:03 PM

Group Number: 1270786

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

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

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11291162401B Moisture Content by 160.3	Sample number(s): 6434482, 6434484				100		80-120		
Batch number: 11298162401A Moisture Content by 160.3	Sample number(s): 6434481, 6434483, 6434485-6434488				100		80-120		

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11293002	Sample number(s): 6434481-6434488								
2378-TCDD	0.0314 U	0.0314	1.00	ng/kg	106		67-158		
12378-PeCDD	0.0231 U	0.0231	5.00	ng/kg	105		70-142		
123478-HxCDD	0.0172 U	0.0172	5.00	ng/kg	100		70-164		
123678-HxCDD	0.0373 J	0.0179	5.00	ng/kg	96		76-134		
123789-HxCDD	0.0323 J	0.0162	5.00	ng/kg	101		64-162		
1234678-HpCDD	0.244 J	0.0198	5.00	ng/kg	99		70-140		
OCDD	0.356 J	0.0157	10.0	ng/kg	96		78-144		
2378-TCDF	0.0253 U	0.0253	1.00	ng/kg	101		75-158		
12378-PeCDF	0.0371 J	0.0138	5.00	ng/kg	103		80-134		
23478-PeCDF	0.0800 J	0.0135	5.00	ng/kg	95		68-160		
123478-HxCDF	0.0412 J	0.0144	5.00	ng/kg	100		72-134		
123678-HxCDF	0.0308 J	0.0122	5.00	ng/kg	99		84-130		
123789-HxCDF	0.0261 J	0.0158	5.00	ng/kg	100		78-130		
234678-HxCDF	0.0373 J	0.0132	5.00	ng/kg	97		70-156		
1234678-HpCDF	0.0886 J	0.00730	5.00	ng/kg	91		82-122		
1234789-HpCDF	0.0364 J	0.0126	5.00	ng/kg	98		78-138		
OCDF	0.107 J	0.0264	10.0	ng/kg	98		63-170		

Sample Matrix Quality Control

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

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11291162401B Moisture Content by 160.3	Sample number(s): 6434482, 6434484					BKG: P431141 4.4	4.3	2	20
Batch number: 11298162401A Moisture Content by 160.3	Sample number(s): 6434481, 6434483, 6434485-6434488					BKG: P435690 2.2	2.3	4 (1)	20
Batch number: 11293002	Sample number(s): 6434481-6434488 UNSPK: P430041								

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/31/11 at 02:03 PM

Group Number: 1270786

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDD	107	108	67-158	1	25				
12378-PeCDD	105	105	70-142	0	25				
123478-HxCDD	99	101	70-164	2	25				
123678-HxCDD	95	96	76-134	1	25				
123789-HxCDD	102	102	64-162	0	25				
1234678-HpCDD	100	100	70-140	0	25				
OCDD	99	96	78-144	3	25				
2378-TCDF	101	99	75-158	2	25				
12378-PeCDF	103	102	80-134	0	25				
23478-PeCDF	96	95	68-160	0	25				
123478-HxCDF	98	100	72-134	3	25				
123678-HxCDF	101	100	84-130	1	25				
123789-HxCDF	101	100	78-130	1	25				
234678-HxCDF	99	98	70-156	1	25				
1234678-HpCDF	91	92	82-122	0	25				
1234789-HpCDF	99	98	78-138	1	25				
OCDF	98	98	63-170	0	25				

Surrogate Quality Control

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

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11293002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6434481	84	79	73	79	78	78
6434482	66	66	62	72	71	65
6434483	78	77	67	81	79	74
6434484	87	83	81	84	87	89
6434485	79	75	72	79	80	80
6434486	76	72	66	73	74	80
6434487	77	69	66	77	75	66
6434488	82	76	74	78	84	82
Blank	68	69	64	75	69	68
MS	70	68	68	78	75	72
MSD	74	74	71	78	78	75
OPR	66	68	65	72	69	73
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
6434481	101	79	82	83	84	93
6434482	98	68	73	74	86	85
6434483	112	78	86	88	96	97
6434484	92	91	99	82	95	94
6434485	98	78	82	78	89	92
6434486	88	79	85	73	80	81

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/31/11 at 02:03 PM

Group Number: 1270786

Surrogate Quality Control

6434487	99	65	71	78	90	90
6434488	87	82	88	76	89	91
Blank	103	73	82	78	84	85
MS	102	72	78	75	89	88
MSD	96	80	87	78	89	89
OPR	96	76	84	74	80	81
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
6434481	91	97	100	80	87	
6434482	83	91	100	61	72	
6434483	96	107	120	69	87	
6434484	92	99	108	88	83	
6434485	90	93	100	78	81	
6434486	83	90	97	77	77	
6434487	88	91	100	72	79	
6434488	87	90	99	83	79	
Blank	86	98	111	61	75	
MS	87	94	105	66	76	
MSD	87	94	105	73	80	
OPR	81	93	104	61	71	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Sample # 6434481-88

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING				PRIMARY FOR ALL LOCATIONS								SECONDARY FOR ALL LOCATIONS								Other Instructions and Notes			
NOTES: *Primary Analytes as indicated on sample labels **Secondary Analytes as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 18 oz. jar collected from the same interval from which Eacores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.						*Metals EPA 8010/8208&7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8092	*Dioxin/Furan EPA 1613B	*Pesticides EPA 314.0	*Hex Chroma EPA 7199	*pH EPA 9045C/040B	Pesticlorate Confirmation by EPA 6850 (10%)	*TPH-SRO EPA 8015R \$	*TPH-LEH EPA 8015B Mod.	*Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NOMA EPA 1625C	**Energies EPA 8330A	**Cyanide EPA 9012B		**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B
Sample Signatures:																									
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																				
SL-265-SA6-SB-4.5	10.11.11	0843	SOIL	NONE	2-Encores										X										
SL-265-SA6-SB-4.0-5.0	10.11.11	0847	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
SL-147-SA7-SB-1.5	10.11.11	1120	SOIL	NONE	2-Encores										X										
SL-147-SA7-SB-1.0-2.0	10.11.11	1122	SOIL	NONE	3-18 oz Jars	X	X	X	X	X	X	X	X			X					X	X	X	X	
SL-155-SA7-SB-2.0	10.11.11	1228	SOIL	NONE	2-Encores										X										
SL-155-SA7-SB-1.5-2.5	10.11.11	1232	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X		
SL-265-SA6-SB-4.5	10.11.11	0843	SOIL	NONE	2-Encores										X										
SL-265-SA6-SB-4.0-5.0	10.11.11	0847	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
SL-009-SA3-SB-4.0-5.0	10.11.11	1505	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X												
Relinquished by: (Signature)	Date/Time		Received for Laboratory by: (Signature)																						
	10/11/2011 / 1630		LLI 10/12/11 0900																						
Received by: (Signature)	Date/Time		Airbill No.(s)																						
			8767 9858 5501, 5497																						
						Laboratory: Lancaster Laboratories, Inc.																			

CHAIN OF CUSTODY RECORD

[illegible]

CHAIN OF CUSTODY RECORD

CDM	SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS										SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes							
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.																																		
Samplers Signatures:																																		
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 8010/60208&7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/TCs EPA 8082	*Dioxin/Furan EPA 1613B	*Pesticides EPA 314.0	*Hex Chlorine EPA 1399	*pH EPA 8045C/8040B	Perchlorate Confirmation by EPA 8950 (10%)	TPH-GRO EPA 8015B \$	**TPH-EFH EPA 8015B Mod	**Nitrate EPA 300.0	*Formaldehyde EPA 8315A	**NOMMA EPA 1625C	**Enthalpic EPA 6130A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Cyclois EPA 8016H	**Alcohols EPA 8015B	**Dowdial EPA 8270									
SL-147-SA7-SB-1.5	10.11.11	1120	SOIL	NONE	2-Encores									X																				
SL-147-SA7-SB-1.0-2.0	10.11.11	1122	SOIL	NONE	3-16 oz Jars	X	X	X	X	X	X	X			X					X	X	X	X											
SL-155-SA7-SB-2.0	10.11.11	1228	SOIL	NONE	2-Encores									X																				
SL-155-SA7-SB-1.5-2.5	10.11.11	1232	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X											
SL-265-SA6-SB-4.5	10.11.11	0843	SOIL	NONE	2-Encores									X																				
SL-265-SA6-SB-4.0-5.0	10.11.11	0847	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X											
SL-009-SA3-SB-4.0-5.0	10.11.11	1505	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X																						
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)													Laboratory:																	
		10/11/2011 / 1630															Lancaster Laboratories, Inc.																	
Received by: (Signature)		Date/Time		Airbill No.(s)																														
				8767 9858 5501, 5497																														

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Wednesday, October 12, 2011 11:05 AM
To: Nicole Maljovec
Cc: Bloisa, Peggy
Subject: Repeated line in 10/11/11 COC

Hi Nicole

I sent you guys a COC with a repeated line, please see my corrected COC. Thanks!

Pam

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

November 03, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/13/2011

Group Number: 1271034

SDG: DE267

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-011-SA3-SB-4.0-5.0 Soil	6435690
SL-011-SA3-SB-4.0-5.0MS Soil	6435691
SL-011-SA3-SB-4.0-5.0MSD Soil	6435692
SL-011-SA3-SB-4.0-5.0DUP Soil	6435693
SL-011-SA3-SB-4.0-5.0RL MS Soil	6435694
SL-011-SA3-SB-4.0-5.0RL LCS Soil	6435695
SL-096-SA7-SB-2.0-3.0 Soil	6435696
DUP01-SA3-QC-101211 Soil	6435697
EB-SA3-SB-101211 Water	6435698
TB-101211 Water	6435699
TB-101211 Sand	6435700
TB-101211 Water	6435701
EB-SA3-SB-101211 Water	6435702

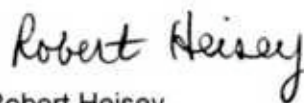
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

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

Respectfully Submitted,



Robert Heisey
Senior Specialist

Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435690
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	17.0 U	17.0	34.1		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	510		1
04688	Benidine	92-87-5	1,200	U 1,200	3,400		1
04688	Benzoic acid	65-85-0	170	U 170	510		1
04688	Benzyl alcohol	100-51-6	170	U 170	510		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170		1
04688	4-Chloroaniline	106-47-8	68	U 68	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170		1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	510		1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	68	U 68	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	510		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	34	U 34	170		1
04688	4-Methylphenol	106-44-5	34	U 34	170		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	34	U 34	170		1
04688	4-Nitroaniline	100-01-6	68	U 68	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	510		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1

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

Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435690
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U 170	510		1
04688	Phenol	108-95-2	17	U 17	170		1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170		1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.67 U	0.67	1.7		1
10138	Acenaphthylene	208-96-8	0.34 U	0.34	1.7		1
10138	Anthracene	120-12-7	0.34 U	0.34	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.67 U	0.67	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.67 U	0.67	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	0.78 J	0.67	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73 J	0.67	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	0.67 U	0.67	1.7		1
10138	Butylbenzylphthalate	85-68-7	6.0 U	6.0	18		1
10138	Di-n-butylphthalate	84-74-2	6.0 U	6.0	18		1
10138	Chrysene	218-01-9	0.34 U	0.34	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.67 U	0.67	1.7		1
10138	Diethylphthalate	84-66-2	6.0 U	6.0	18		1
10138	Dimethylphthalate	131-11-3	6.0 U	6.0	18		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.0 U	6.0	18		1
10138	Fluoranthene	206-44-0	0.67 U	0.67	1.7		1
10138	Fluorene	86-73-7	0.67 U	0.67	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.67 U	0.67	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.67 U	0.67	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.67 U	0.67	1.7		1
10138	Naphthalene	91-20-3	0.67 U	0.67	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.67 U	0.67	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.0 U	6.0	18		1
10138	Phenanthrene	85-01-8	0.67 U	0.67	1.7		1
10138	Pyrene	129-00-0	0.67 U	0.67	1.7		1
GC Volatiles	TPH GRO	SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
	mod						
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	3.2	0.2	1.0		24.65
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	61 U	61	120	1000000 0	1

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Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435690
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	41 U	41	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	82 U	82	250	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	82 U	82	250	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	41 U	41	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	41 U	41	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	41 U	41	120	1000000 0	1
10132	HMX	2691-41-0	100 U	100	310	1000000 0	1
10132	Nitrobenzene	98-95-3	41 U	41	120	1000000 0	1
10132	Nitroglycerin	55-63-0	820 U	820	2,500	1000000 0	1
10132	2-Nitrotoluene	88-72-2	82 U	82	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100 U	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	82 U	82	120	1000000 0	1
10132	PETN	78-11-5	820 U	820	2,500	1000000 0	1
10132	RDX	121-82-4	51 U	51	120	1000000 0	1
10132	Tetryl	479-45-8	63 U	63	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	41 U	41	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	41 U	41	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	610 U	610	1,500		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4		1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4		1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4		1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.7		1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.7		1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.7		1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.7		1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.7		1
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.7		1
10225	PCB-1260	11096-82-5	0.48 J	0.40	1.7		1

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Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435690
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.7		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.7		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	510		1
10501	Isopropanol	67-63-0	100 U	100	510		1
10501	Methanol	67-56-1	100 U	100	510		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.1 U	5.1	10		1
08283	Ethylene glycol	107-21-1	5.1 U	5.1	10		1
08283	Propylene glycol	57-55-6	5.1 U	5.1	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.5 U	1.5	3.6		1
10318	o-Terphenyl	84-15-1	1.5 U	1.5	3.6		1
10318	p-Terphenyl	92-94-4	1.5 U	1.5	3.6		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.41 U	0.41	1.2		1
10199	EFH (C15-C20)	n.a.	0.45 J	0.41	1.2		1
10199	EFH (C21-C30)	n.a.	1.7	0.41	1.2		1
10199	EFH (C30 - C40)	n.a.	5.1	0.41	1.2		1
10199	EFH (C8-C11)	n.a.	0.41 U	0.41	1.2		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	9,830	6.01	19.9		1
07914	Boron	7440-42-8	3.50 J	0.357	4.96		1
01650	Calcium	7440-70-2	5,160	2.48	19.9		1
01654	Iron	7439-89-6	17,400	2.59	19.9		1
01656	Lithium	7439-93-2	24.7	0.62	2.0		1
01657	Magnesium	7439-95-4	3,410	0.437	9.93		1
06958	Manganese	7439-96-5	238	0.0357	0.496		1
10145	Phosphorus	7723-14-0	289	0.347	9.93		1
01662	Potassium	7440-09-7	1,970	11.2	49.6		1
01667	Sodium	7440-23-5	89.3 J	5.91	99.3		1
07968	Strontium	7440-24-6	19.5	0.0248	0.496		1
06969	Tin	7440-31-5	2.72 J	0.318	9.93		1
06970	Titanium	7440-32-6	1,080	0.0698	0.983		1
10146	Zirconium	7440-67-7	2.86 J	0.457	4.96		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0749 U	0.0749	0.202		2

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Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435690
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.41	0.0810	0.405		2
06126	Barium	7440-39-3	85.2	0.107	0.405		2
06127	Beryllium	7440-41-7	0.689	0.0162	0.101		2
06128	Cadmium	7440-43-9	0.127	0.0445	0.101		2
06131	Chromium	7440-47-3	17.8	0.121	0.405		2
06132	Cobalt	7440-48-4	6.94	0.0202	0.101		2
06133	Copper	7440-50-8	9.20	0.0810	0.405		2
06135	Lead	7439-92-1	8.25	0.0103	0.202		2
06138	Molybdenum	7439-98-7	0.290	0.0506	0.101		2
06139	Nickel	7440-02-0	12.3	0.101	0.405		2
06141	Selenium	7782-49-2	0.167 J	0.0587	0.405		2
06142	Silver	7440-22-4	0.0395 J	0.0144	0.101		2
06145	Thallium	7440-28-0	0.312	0.0304	0.101		2
06148	Vanadium	7440-62-2	35.2	0.0223	0.101		2
06149	Zinc	7440-66-6	68.2	0.567	3.04		2
SW-846 7471A							
00159	Mercury	7439-97-6	0.0071 U	0.0071	0.100		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1	0.82	1.0		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.0 J	0.82	1.5		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.2 U	9.2	30.7		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.18 U	0.18	0.51		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	8.55	0.0100	0.0100		1
	Wet Chemistry		%	%	%	%	
	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	2.2	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

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Analysis Report

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

Page 6 of 7

Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435690
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01BKG

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-011-SA3-SB-4.5.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11290SLD026	11/01/2011 21:10	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 14:00	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11287SLB026	10/17/2011 15:13	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11290SLD026	10/18/2011 06:55	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11287SLB026	10/14/2011 10:30	Olivia Arosemena	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16A	10/17/2011 20:44	Laura M Krieger	24.65
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128625838	10/13/2011 12:43	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128625838	10/13/2011 12:44	Larry E Bevins	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 18:04	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910002A	10/19/2011 19:34	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112900017A	10/21/2011 04:37	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112900017A	10/18/2011 10:15	Denise L Trimby	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910002A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900025A	10/17/2011 19:32	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112930029A	10/20/2011 20:02	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/24/2011 18:22	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112910012A	10/20/2011 20:51	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112910012A	10/18/2011 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900025A	10/17/2011 18:30	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112930029A	10/20/2011 16:05	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1

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Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435690
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112975708004	10/25/2011 13:50	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	112875708002	10/24/2011 00:57	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112871026001D	10/18/2011 04:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112871026001C	10/19/2011 18:28	Parker D Lindstrom	2
06139	Nickel	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112871026001B	10/18/2011 04:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112871026001A	10/18/2011 04:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112875711001	10/17/2011 18:57	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112875708002	10/17/2011 10:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112975708004	10/24/2011 21:53	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112871026001	10/17/2011 11:24	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112875711001	10/17/2011 13:00	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201B	10/25/2011 23:19	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11297495201B	10/25/2011 23:19	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202B	10/20/2011 06:12	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 14:28	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201A	10/21/2011 08:01	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201B	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202B	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201A	10/20/2011 15:35	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402A	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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

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

Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	883	17.0	34.0		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,700	17	170		1
04688	Acenaphthylene	208-96-8	1,800	17	170		1
04688	Aniline	62-53-3	1,200	170	510		1
04688	Anthracene	120-12-7	1,700	17	170		1
04688	Benzidine	92-87-5	3,300	J 1,200	3,400		1
04688	Benzo(a)anthracene	56-55-3	1,700	17	170		1
04688	Benzo(a)pyrene	50-32-8	1,700	17	170		1
04688	Benzo(b)fluoranthene	205-99-2	1,800	17	170		1
04688	Benzo(g,h,i)perylene	191-24-2	1,900	17	170		1
04688	Benzo(k)fluoranthene	207-08-9	1,600	17	170		1
04688	Benzoic acid	65-85-0	170	U 170	510		1
04688	Benzyl alcohol	100-51-6	1,800	170	510		1
04688	4-Bromophenyl-phenylether	101-55-3	1,800	17	170		1
04688	Butylbenzylphthalate	85-68-7	1,700	17	170		1
04688	Di-n-butylphthalate	84-74-2	1,600	17	170		1
04688	Carbazole	86-74-8	1,600	17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	1,900	34	170		1
04688	4-Chloroaniline	106-47-8	1,100	68	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800	17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700	17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,700	17	170		1
04688	2-Chloronaphthalene	91-58-7	1,400	17	170		1
04688	2-Chlorophenol	95-57-8	1,700	17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,800	34	170		1
04688	Chrysene	218-01-9	1,600	17	170		1
04688	Dibenz(a,h)anthracene	53-70-3	1,900	17	170		1
04688	Dibenzofuran	132-64-9	1,700	17	170		1
04688	1,2-Dichlorobenzene	95-50-1	1,500	17	170		1
04688	1,3-Dichlorobenzene	541-73-1	1,400	17	170		1
04688	1,4-Dichlorobenzene	106-46-7	1,400	17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	940	100	340		1
04688	2,4-Dichlorophenol	120-83-2	1,700	17	170		1
04688	Diethylphthalate	84-66-2	1,600	17	170		1
04688	2,4-Dimethylphenol	105-67-9	1,800	34	170		1
04688	3,5-Dimethylphenol	108-68-9	2,000	34	170		1
04688	Dimethylphthalate	131-11-3	1,700	17	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	J 170	510		1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	1,700	34	170		1
04688	2,6-Dinitrotoluene	606-20-2	1,800	17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	1,800	17	170		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,700	17	340		1
04688	Fluoranthene	206-44-0	1,700	17	170		1
04688	Fluorene	86-73-7	1,700	17	170		1
04688	Hexachlorobenzene	118-74-1	1,800	17	170		1
04688	Hexachlorobutadiene	87-68-3	1,600	68	170		1

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

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

Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorocyclopentadiene	77-47-4	1,600	170	510		1
04688	Hexachloroethane	67-72-1	1,400	17	170		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,900	17	170		1
04688	Isophorone	78-59-1	1,800	17	170		1
04688	1-Methylnaphthalene	90-12-0	1,600	17	170		1
04688	2-Methylnaphthalene	91-57-6	1,700	17	170		1
04688	2-Methylphenol	95-48-7	1,800	34	170		1
04688	4-Methylphenol	106-44-5	1,800	34	170		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,600	17	170		1
04688	2-Nitroaniline	88-74-4	1,800	17	170		1
04688	3-Nitroaniline	99-09-2	1,600	34	170		1
04688	4-Nitroaniline	100-01-6	1,300	68	170		1
04688	Nitrobenzene	98-95-3	1,800	17	170		1
04688	2-Nitrophenol	88-75-5	1,500	17	170		1
04688	4-Nitrophenol	100-02-7	1,100	170	510		1
04688	N-Nitrosodimethylamine	62-75-9	1,700	34	170		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,700	17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	1,700	17	170		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,800	17	170		1
04688	Pentachlorophenol	87-86-5	400	J 170	510		1
04688	Phenanthrene	85-01-8	1,600	17	170		1
04688	Phenol	108-95-2	1,800	17	170		1
04688	Pyrene	129-00-0	1,700	17	170		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,600	17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	1,600	34	170		1
04688	2,4,6-Trichlorophenol	88-06-2	1,400	34	170		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	27	0.67	1.7		1
10138	Acenaphthylene	208-96-8	27	0.34	1.7		1
10138	Anthracene	120-12-7	30	0.34	1.7		1
10138	Benzo(a)anthracene	56-55-3	29	0.67	1.7		1
10138	Benzo(a)pyrene	50-32-8	29	0.67	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	34	0.67	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	16	0.67	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	30	0.67	1.7		1
10138	Butylbenzylphthalate	85-68-7	24	6.0	18		1
10138	Di-n-butylphthalate	84-74-2	28	6.0	18		1
10138	Chrysene	218-01-9	29	0.34	1.7		1

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Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	Dibenz(a,h)anthracene	53-70-3	19 ug/kg	0.67 ug/kg	1.7 ug/kg		1
10138	Diethylphthalate	84-66-2	27	6.0	18		1
10138	Dimethylphthalate	131-11-3	29	6.0	18		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	26	6.0	18		1
10138	Fluoranthene	206-44-0	39	0.67	1.7		1
10138	Fluorene	86-73-7	28	0.67	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	19	0.67	1.7		1
10138	1-Methylnaphthalene	90-12-0	24	0.67	1.7		1
10138	2-Methylnaphthalene	91-57-6	24	0.67	1.7		1
10138	Naphthalene	91-20-3	27	0.67	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	27	0.67	1.7		1
10138	Di-n-octylphthalate	117-84-0	31	6.0	18		1
10138	Phenanthrene	85-01-8	28	0.67	1.7		1
10138	Pyrene	129-00-0	22	0.67	1.7		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	20 mg/kg	0.2 mg/kg	1.1 mg/kg		25.83
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,200 ug/kg	61 ug/kg	120 ug/kg		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,200	41	120		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	82 U	82	250		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	82 U	82	250		1
10132	1,3-Dinitrobenzene	99-65-0	2,300	41	120		1
10132	2,4-Dinitrotoluene	121-14-2	2,100	41	120		1
10132	2,6-Dinitrotoluene	606-20-2	2,200	41	120		1
10132	HMX	2691-41-0	1,900	100	310		1
10132	Nitrobenzene	98-95-3	2,200	41	120		1
10132	Nitroglycerin	55-63-0	49,000	820	2,500		1
10132	2-Nitrotoluene	88-72-2	2,100	82	120		1
10132	3-Nitrotoluene	99-08-1	2,300	100	120		1
10132	4-Nitrotoluene	99-99-0	2,100	82	120		1
10132	PETN	78-11-5	53,000	820	2,500		1
10132	RDX	121-82-4	2,100	51	120		1
10132	Tetryl	479-45-8	1,900	63	120		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,100	41	120		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,200	41	120		1
HPLC Organics SW-846 8315A							
04173	20a Formaldehyde 8315A	50-00-0	4,900 ug/kg	610 ug/kg	1,500 ug/kg		1
Pesticides/PCBs SW-846 8082							
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4		1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4		1
10225	Aroclor 5460	11126-42-4	2.1 J	1.0	3.4		1
10225	PCB-1016	12674-11-2	16	0.34	1.7		1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.7		1

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Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs							
	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.7		1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.7		1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.7		1
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.7		1
10225	PCB-1260	11096-82-5	19	0.40	1.7		1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.7		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.7		1
GC Miscellaneous							
	SW-846 8015B		ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	2,000	100	510		1
10501	Isopropanol	67-63-0	1,900	100	510		1
10501	Methanol	67-56-1	2,000	100	510		1
GC Miscellaneous							
	SW-846 8015B modified		mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	11	5.1	10		1
08283	Ethylene glycol	107-21-1	92	5.1	10		1
08283	Propylene glycol	57-55-6	130	5.1	10		1
GC Petroleum Hydrocarbons							
	SW-846 8015B		mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	7.8	1.5	3.6		1
10318	o-Terphenyl	84-15-1	9.1	1.5	3.6		1
10318	p-Terphenyl	92-94-4	7.3	1.5	3.6		1
GC Petroleum Hydrocarbons							
	SW-846 8015B modified		mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.65 J	0.41	1.2		1
10199	EFH (C15-C20)	n.a.	1.3	0.41	1.2		1
10199	EFH (C21-C30)	n.a.	4.5	0.41	1.2		1
10199	EFH (C30 - C40)	n.a.	9.3	0.41	1.2		1
10199	EFH (C8-C11)	n.a.	0.51 J	0.41	1.2		1
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,600	6.01	19.9		1
07914	Boron	7440-42-8	188	0.357	4.96		1
01650	Calcium	7440-70-2	4,720	2.48	19.9		1
01654	Iron	7439-89-6	19,400	2.59	19.9		1
01656	Lithium	7439-93-2	125	0.62	2.0		1
01657	Magnesium	7439-95-4	3,930	0.437	9.93		1
06958	Manganese	7439-96-5	302	0.0357	0.496		1
10145	Phosphorus	7723-14-0	372	0.347	9.93		1
01662	Potassium	7440-09-7	3,220	11.2	49.6		1
01667	Sodium	7440-23-5	1,060	5.91	99.3		1
07968	Strontium	7440-24-6	114	0.0248	0.496		1
06969	Tin	7440-31-5	365	0.318	9.93		1
06970	Titanium	7440-32-6	1,340	0.0705	0.993		1

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

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Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
10146	Zirconium	7440-67-7	98.2	0.457	4.96	mg/kg	1
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.676	0.0721	0.195	mg/kg	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.66	0.0779	0.390		2
06126	Barium	7440-39-3	89.8	0.103	0.390		2
06127	Beryllium	7440-41-7	1.53	0.0156	0.0974		2
06128	Cadmium	7440-43-9	1.38	0.0428	0.0974		2
06131	Chromium	7440-47-3	28.2	0.117	0.390		2
06132	Cobalt	7440-48-4	69.3	0.0195	0.0974		2
06133	Copper	7440-50-8	21.0	0.0779	0.390		2
06135	Lead	7439-92-1	12.2	0.0099	0.195		2
06138	Molybdenum	7439-98-7	13.2	0.0487	0.0974		2
06139	Nickel	7440-02-0	23.7	0.0974	0.390		2
06141	Selenium	7782-49-2	2.51	0.0565	0.390		2
06142	Silver	7440-22-4	12.8	0.0138	0.0974		2
06145	Thallium	7440-28-0	0.781	0.0292	0.0974		2
06148	Vanadium	7440-62-2	43.5	0.0214	0.0974		2
06149	Zinc	7440-66-6	68.7	0.545	2.92		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.163	0.0067	0.0956		1
Wet Chemistry							
		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	9.9	0.83	1.0		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	10.8	0.83	1.5		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	573	9.2	30.7		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	36.1	0.20	1.0		5
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	4.5	0.18	0.51		1
Wet Chemistry							
		EPA 160.3 modified	%	%	%	%	
11625	Moisture Content by 160.3	n.a.	2.2	0.50	0.50		1

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

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

Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MS

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-011-SA3-SB-4.5.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11290SLD026	11/01/2011 21:29	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 14:25	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11287SLB026	10/17/2011 15:46	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11290SLD026	10/18/2011 06:55	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11287SLB026	10/14/2011 10:30	Olivia Arosemena	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16A	10/17/2011 21:22	Laura M Krieger	25.83
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128625838	10/13/2011 12:45	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128625838	10/13/2011 12:46	Larry E Bevins	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 18:46	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910002A	10/20/2011 16:19	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112900017A	10/21/2011 04:56	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112900017A	10/18/2011 10:15	Denise L Trimby	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910002A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900025A	10/17/2011 20:22	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112930029A	10/20/2011 20:15	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/24/2011 18:44	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112910012A	10/20/2011 21:15	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112910012A	10/18/2011 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900025A	10/17/2011 18:30	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112930029A	10/20/2011 16:05	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1

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

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Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112975708004	10/25/2011 14:02	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	112875708002	10/24/2011 01:09	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112871026001D	10/18/2011 05:05	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112871026001C	10/18/2011 05:05	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112871026001B	10/18/2011 05:05	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112871026001A	10/18/2011 05:05	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112875711001	10/17/2011 19:00	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112875708002	10/17/2011 10:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112975708004	10/24/2011 21:53	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112871026001	10/17/2011 11:24	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112875711001	10/17/2011 13:00	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201B	10/25/2011 23:51	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11297495201B	10/25/2011 23:51	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202B	10/20/2011 07:21	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	3	11291243201A	10/21/2011 10:49	Elyse P Brunstetter	5
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201A	10/21/2011 08:02	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201B	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202B	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201A	10/20/2011 15:35	Carolyn M Mastropietro	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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Analysis Report

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

Page 1 of 7

Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435692
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	881	17.0	34.0		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,700	17	170		1
04688	Acenaphthylene	208-96-8	1,800	17	170		1
04688	Aniline	62-53-3	1,200	170	510		1
04688	Anthracene	120-12-7	1,700	17	170		1
04688	Benzidine	92-87-5	3,100	J 1,200	3,400		1
04688	Benzo(a)anthracene	56-55-3	1,600	17	170		1
04688	Benzo(a)pyrene	50-32-8	1,700	17	170		1
04688	Benzo(b)fluoranthene	205-99-2	1,700	17	170		1
04688	Benzo(g,h,i)perylene	191-24-2	1,800	17	170		1
04688	Benzo(k)fluoranthene	207-08-9	1,600	17	170		1
04688	Benzoic acid	65-85-0	170	U 170	510		1
04688	Benzyl alcohol	100-51-6	1,800	170	510		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700	17	170		1
04688	Butylbenzylphthalate	85-68-7	1,600	17	170		1
04688	Di-n-butylphthalate	84-74-2	1,600	17	170		1
04688	Carbazole	86-74-8	1,600	17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	1,900	34	170		1
04688	4-Chloroaniline	106-47-8	1,100	68	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,700	17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,600	17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,700	17	170		1
04688	2-Chloronaphthalene	91-58-7	1,300	17	170		1
04688	2-Chlorophenol	95-57-8	1,700	17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,700	34	170		1
04688	Chrysene	218-01-9	1,600	17	170		1
04688	Dibenz(a,h)anthracene	53-70-3	1,800	17	170		1
04688	Dibenzofuran	132-64-9	1,600	17	170		1
04688	1,2-Dichlorobenzene	95-50-1	1,400	17	170		1
04688	1,3-Dichlorobenzene	541-73-1	1,400	17	170		1
04688	1,4-Dichlorobenzene	106-46-7	1,400	17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,000	100	340		1
04688	2,4-Dichlorophenol	120-83-2	1,800	17	170		1
04688	Diethylphthalate	84-66-2	1,600	17	170		1
04688	2,4-Dimethylphenol	105-67-9	1,800	34	170		1
04688	3,5-Dimethylphenol	108-68-9	2,000	34	170		1
04688	Dimethylphthalate	131-11-3	1,600	17	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	J 170	510		1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	1,700	34	170		1
04688	2,6-Dinitrotoluene	606-20-2	1,700	17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	1,800	17	170		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,700	17	340		1
04688	Fluoranthene	206-44-0	1,600	17	170		1
04688	Fluorene	86-73-7	1,700	17	170		1
04688	Hexachlorobenzene	118-74-1	1,800	17	170		1
04688	Hexachlorobutadiene	87-68-3	1,600	68	170		1

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

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Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435692
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorocyclopentadiene	77-47-4	1,600	170	510		1
04688	Hexachloroethane	67-72-1	1,400	17	170		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,800	17	170		1
04688	Isophorone	78-59-1	1,800	17	170		1
04688	1-Methylnaphthalene	90-12-0	1,600	17	170		1
04688	2-Methylnaphthalene	91-57-6	1,700	17	170		1
04688	2-Methylphenol	95-48-7	1,800	34	170		1
04688	4-Methylphenol	106-44-5	1,800	34	170		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,600	17	170		1
04688	2-Nitroaniline	88-74-4	1,800	17	170		1
04688	3-Nitroaniline	99-09-2	1,600	34	170		1
04688	4-Nitroaniline	100-01-6	1,300	68	170		1
04688	Nitrobenzene	98-95-3	1,800	17	170		1
04688	2-Nitrophenol	88-75-5	1,800	17	170		1
04688	4-Nitrophenol	100-02-7	1,300	170	510		1
04688	N-Nitrosodimethylamine	62-75-9	1,700	34	170		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,700	17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	1,600	17	170		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,700	17	170		1
04688	Pentachlorophenol	87-86-5	690	170	510		1
04688	Phenanthrene	85-01-8	1,600	17	170		1
04688	Phenol	108-95-2	1,700	17	170		1
04688	Pyrene	129-00-0	1,600	17	170		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,600	17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	1,700	34	170		1
04688	2,4,6-Trichlorophenol	88-06-2	1,700	34	170		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	30	0.67	1.7		1
10138	Acenaphthylene	208-96-8	29	0.34	1.7		1
10138	Anthracene	120-12-7	32	0.34	1.7		1
10138	Benzo(a)anthracene	56-55-3	32	0.67	1.7		1
10138	Benzo(a)pyrene	50-32-8	31	0.67	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	37	0.67	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	18	0.67	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	32	0.67	1.7		1
10138	Butylbenzylphthalate	85-68-7	26	6.0	18		1
10138	Di-n-butylphthalate	84-74-2	30	6.0	18		1
10138	Chrysene	218-01-9	32	0.34	1.7		1

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

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Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435692
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	Dibenz(a,h)anthracene	53-70-3	21	0.67	1.7		1
10138	Diethylphthalate	84-66-2	29	6.0	18		1
10138	Dimethylphthalate	131-11-3	33	6.0	18		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	28	6.0	18		1
10138	Fluoranthene	206-44-0	40	0.67	1.7		1
10138	Fluorene	86-73-7	30	0.67	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	21	0.67	1.7		1
10138	1-Methylnaphthalene	90-12-0	28	0.67	1.7		1
10138	2-Methylnaphthalene	91-57-6	28	0.67	1.7		1
10138	Naphthalene	91-20-3	30	0.67	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	31	0.67	1.7		1
10138	Di-n-octylphthalate	117-84-0	32	6.0	18		1
10138	Phenanthrene	85-01-8	31	0.67	1.7		1
10138	Pyrene	129-00-0	25	0.67	1.7		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	22	0.3	1.3		31.73
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,300	61	120		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,200	41	120		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	82	U	250		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	82	U	250		1
10132	1,3-Dinitrobenzene	99-65-0	2,300	41	120		1
10132	2,4-Dinitrotoluene	121-14-2	2,100	41	120		1
10132	2,6-Dinitrotoluene	606-20-2	2,100	41	120		1
10132	HMX	2691-41-0	1,900	100	310		1
10132	Nitrobenzene	98-95-3	2,100	41	120		1
10132	Nitroglycerin	55-63-0	49,000	820	2,500		1
10132	2-Nitrotoluene	88-72-2	2,100	82	120		1
10132	3-Nitrotoluene	99-08-1	2,200	100	120		1
10132	4-Nitrotoluene	99-99-0	2,100	82	120		1
10132	PETN	78-11-5	53,000	820	2,500		1
10132	RDX	121-82-4	2,000	51	120		1
10132	Tetryl	479-45-8	1,900	63	120		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,100	41	120		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,200	41	120		1
HPLC Organics SW-846 8315A							
04173	20a Formaldehyde 8315A	50-00-0	5,100	610	1,500		1
Pesticides/PCBs SW-846 8082							
10225	Aroclor 5432	63496-31-1	1.0	U	3.4		1
10225	Aroclor 5442	12642-23-8	1.0	U	3.4		1
10225	Aroclor 5460	11126-42-4	1.0	U	3.4		1
10225	PCB-1016	12674-11-2	13		1.7		1
10225	PCB-1221	11104-28-2	0.34	U	1.7		1

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

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

Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435692
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.7		1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.7		1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.7		1
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.7		1
10225	PCB-1260	11096-82-5	15	0.40	1.7		1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.7		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.7		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	2,100	100	510		1
10501	Isopropanol	67-63-0	2,100	100	510		1
10501	Methanol	67-56-1	2,200	100	510		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	17	5.1	10		1
08283	Ethylene glycol	107-21-1	87	5.1	10		1
08283	Propylene glycol	57-55-6	130	5.1	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	7.9	1.5	3.6		1
10318	o-Terphenyl	84-15-1	9.2	1.5	3.6		1
10318	p-Terphenyl	92-94-4	7.8	1.5	3.6		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	7.7	0.41	1.2		1
10199	EFH (C15-C20)	n.a.	18	0.41	1.2		1
10199	EFH (C21-C30)	n.a.	8.7	0.41	1.2		1
10199	EFH (C30 - C40)	n.a.	7.5	0.41	1.2		1
10199	EFH (C8-C11)	n.a.	1.1 J	0.41	1.2		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,600	6.12	20.2		1
07914	Boron	7440-42-8	189	0.364	5.06		1
01650	Calcium	7440-70-2	5,390	2.53	20.2		1
01654	Iron	7439-89-6	18,300	2.64	20.2		1
01656	Lithium	7439-93-2	124	0.63	2.0		1
01657	Magnesium	7439-95-4	3,870	0.445	10.1		1
06958	Manganese	7439-96-5	286	0.0364	0.506		1
10145	Phosphorus	7723-14-0	550	0.354	10.1		1
01662	Potassium	7440-09-7	3,180	11.4	50.6		1
01667	Sodium	7440-23-5	1,040	6.02	101		1
07968	Strontium	7440-24-6	114	0.0253	0.506		1
06969	Tin	7440-31-5	371	0.324	10.1		1
06970	Titanium	7440-32-6	1,330	0.0698	0.983		1

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

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

Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435692
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
10146	Zirconium	7440-67-7	99.6	0.466	5.06	mg/kg	1
SW-846 6010B							
06124	Antimony	7440-36-0	0.490	0.0721	0.195	mg/kg	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.17	0.0779	0.390	mg/kg	2
06126	Barium	7440-39-3	76.1	0.103	0.390	mg/kg	2
06127	Beryllium	7440-41-7	1.40	0.0156	0.0974	mg/kg	2
06128	Cadmium	7440-43-9	1.24	0.0428	0.0974	mg/kg	2
06131	Chromium	7440-47-3	24.7	0.117	0.390	mg/kg	2
06132	Cobalt	7440-48-4	62.5	0.0195	0.0974	mg/kg	2
06133	Copper	7440-50-8	18.8	0.0779	0.390	mg/kg	2
06135	Lead	7439-92-1	9.09	0.0099	0.195	mg/kg	2
06138	Molybdenum	7439-98-7	11.7	0.0487	0.0974	mg/kg	2
06139	Nickel	7440-02-0	20.1	0.0974	0.390	mg/kg	2
06141	Selenium	7782-49-2	2.16	0.0565	0.390	mg/kg	2
06142	Silver	7440-22-4	11.8	0.0138	0.0974	mg/kg	2
06145	Thallium	7440-28-0	0.707	0.0292	0.0974	mg/kg	2
06148	Vanadium	7440-62-2	38.5	0.0214	0.0974	mg/kg	2
06149	Zinc	7440-66-6	66.3	0.545	2.92	mg/kg	2
SW-846 7471A							
00159	Mercury	7439-97-6	0.165	0.0070	0.0995	mg/kg	1
Wet Chemistry							
EPA 160.3 modified							
11625	Moisture Content by 160.3	n.a.	2.2	0.50	0.50	%	1

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-011-SA3-SB-4.5.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11290SLD026	11/01/2011 21:48	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 14:50	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11287SLB026	10/17/2011 16:19	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11290SLD026	10/18/2011 06:55	Katheryne V Sponheimer	1

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Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435692
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11287SLB026	10/14/2011 10:30	Olivia Arosemena	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16A	10/17/2011 22:00	Laura M Krieger	31.73
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128625838	10/13/2011 12:46	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128625838	10/13/2011 12:47	Larry E Bevins	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 19:28	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910002A	10/19/2011 19:53	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112900017A	10/21/2011 05:15	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112900017A	10/18/2011 10:15	Denise L Trimby	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910002A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900025A	10/17/2011 20:39	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112930029A	10/20/2011 20:28	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/24/2011 19:07	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112910012A	10/20/2011 21:39	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112910012A	10/18/2011 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	2	112900025A	10/17/2011 18:30	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112930029A	10/20/2011 16:05	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112975708004	10/25/2011 14:06	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	112875708002	10/24/2011 01:12	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112871026001D	10/18/2011 05:08	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112871026001C	10/18/2011 05:08	Choon Y Tian	2

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Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435692
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06139	Nickel	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112871026001B	10/18/2011 05:08	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112871026001A	10/18/2011 05:08	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112875711001	10/17/2011 19:01	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112875708002	10/17/2011 10:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112975708004	10/24/2011 21:53	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112871026001	10/17/2011 11:24	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112875711001	10/17/2011 13:00	James L Mertz	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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Analysis Report

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

Page 1 of 3

Sample Description: SL-011-SA3-SB-4.0-5.0DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435693
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,600	6.01	19.9		1
07914	Boron	7440-42-8	3.70 J	0.357	4.96		1
01650	Calcium	7440-70-2	4,910	2.48	19.9		1
01654	Iron	7439-89-6	19,000	2.59	19.9		1
01656	Lithium	7439-93-2	26.8	0.62	2.0		1
01657	Magnesium	7439-95-4	3,640	0.437	9.93		1
06958	Manganese	7439-96-5	260	0.0357	0.496		1
10145	Phosphorus	7723-14-0	286	0.347	9.93		1
01662	Potassium	7440-09-7	2,110	11.2	49.6		1
01667	Sodium	7440-23-5	91.7 J	5.91	99.3		1
07968	Strontium	7440-24-6	19.8	0.0248	0.496		1
06969	Tin	7440-31-5	2.77 J	0.318	9.93		1
06970	Titanium	7440-32-6	1,050	0.0705	0.993		1
10146	Zirconium	7440-67-7	4.08 J	0.457	4.96		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0735 U	0.0735	0.199		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.21	0.0794	0.397		2
06126	Barium	7440-39-3	68.2	0.105	0.397		2
06127	Beryllium	7440-41-7	0.580	0.0159	0.0993		2
06128	Cadmium	7440-43-9	0.132	0.0437	0.0993		2
06131	Chromium	7440-47-3	17.2	0.119	0.397		2
06132	Cobalt	7440-48-4	6.03	0.0199	0.0993		2
06133	Copper	7440-50-8	8.99	0.0794	0.397		2
06135	Lead	7439-92-1	6.50	0.0101	0.199		2
06138	Molybdenum	7439-98-7	0.311	0.0496	0.0993		2
06139	Nickel	7440-02-0	9.96	0.0993	0.397		2
06141	Selenium	7782-49-2	0.123 J	0.0576	0.397		2
06142	Silver	7440-22-4	0.0185 J	0.0141	0.0993		2
06145	Thallium	7440-28-0	0.238	0.0298	0.0993		2
06148	Vanadium	7440-62-2	28.3	0.0218	0.0993		2
06149	Zinc	7440-66-6	61.8	0.556	2.98		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0069 U	0.0069	0.0978		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.9	0.81	1.0		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.91 J	0.81	1.5		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.2 U	9.2	30.7		1
SW-846 7199							
			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0		1

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



Analysis Report

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Sample Description: SL-011-SA3-SB-4.0-5.0DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435693
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry SW-846 9012B							
05895	16a Cyanide by 9012B	57-12-5	0.18 U	0.18	0.49		1
SW-846 9045C modified							
00394	17a pH by 9045C	n.a.	8.53	0.0100	0.0100		1
Wet Chemistry EPA 160.3 modified							
11626	28a Moisture Content by 160.3	n.a.	2.3	0.50	0.50		1
The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.							
11625	Moisture Content by 160.3	n.a.	2.2	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112975708004	10/25/2011 13:58	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	112875708002	10/24/2011 01:05	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112871026001D	10/18/2011 05:02	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2

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

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

Sample Description: SL-011-SA3-SB-4.0-5.0DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435693
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	112871026001C	10/19/2011 18:31	Parker D Lindstrom	2
06139	Nickel	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112871026001B	10/18/2011 05:02	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112871026001A	10/18/2011 05:02	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112875711001	10/17/2011 18:59	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112875708002	10/17/2011 10:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112975708004	10/24/2011 21:53	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112871026001	10/17/2011 11:24	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112875711001	10/17/2011 13:00	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11297495201B	10/25/2011 23:35	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11297495201B	10/25/2011 23:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202B	10/20/2011 06:35	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11291243201A	10/20/2011 15:41	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201A	10/21/2011 08:03	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11297495201B	10/24/2011 21:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202B	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201A	10/20/2011 15:35	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402A	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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



Analysis Report

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Page 1 of 3

Sample Description: SL-011-SA3-SB-4.0-5.0RL MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435694
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01RLR

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	130	61	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	120	J 41	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	82	U 82	250	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	82	U 82	250	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	120	J 41	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	120	J 41	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	120	J 41	120	1000000 0	1
10132	HMX	2691-41-0	120	J 100	310	1000000 0	1
10132	Nitrobenzene	98-95-3	110	J 41	120	1000000 0	1
10132	Nitroglycerin	55-63-0	2,600	820	2,500	1000000 0	1
10132	2-Nitrotoluene	88-72-2	160	82	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	150	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	140	82	120	1000000 0	1
10132	PETN	78-11-5	2,700	820	2,500	1000000 0	1
10132	RDX	121-82-4	93	J 51	120	1000000 0	1
10132	Tetryl	479-45-8	87	J 63	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	110	J 41	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	110	J 41	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	1,800	610	1,500		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0	U 1.0	3.4		1
10225	Aroclor 5442	12642-23-8	1.0	U 1.0	3.4		1
10225	Aroclor 5460	11126-42-4	1.5	J 1.0	3.4		1
10225	PCB-1016	12674-11-2	1.9	0.34	1.7		1
10225	PCB-1221	11104-28-2	0.34	U 0.34	1.7		1
10225	PCB-1232	11141-16-5	0.34	U 0.34	1.7		1
10225	PCB-1242	53469-21-9	0.34	U 0.34	1.7		1
10225	PCB-1248	12672-29-6	0.34	U 0.34	1.7		1

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

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

Sample Description: SL-011-SA3-SB-4.0-5.0RL MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435694
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01RLR

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.7		1
10225	PCB-1260	11096-82-5	2.5	0.40	1.7		1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.7		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.7		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	540	100	510		1
10501	Isopropanol	67-63-0	500 J	100	510		1
10501	Methanol	67-56-1	630	100	510		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 J	1.5	3.6		1
10318	o-Terphenyl	84-15-1	1.8 J	1.5	3.6		1
10318	p-Terphenyl	92-94-4	1.7 J	1.5	3.6		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.68 J	0.41	1.2		1
10199	EFH (C15-C20)	n.a.	2.6	0.41	1.2		1
10199	EFH (C21-C30)	n.a.	15	0.41	1.2		1
10199	EFH (C30 - C40)	n.a.	38	0.41	1.2		1
10199	EFH (C8-C11)	n.a.	0.41 U	0.41	1.2		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11625	Moisture Content by 160.3	n.a.	2.2	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 20:11	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910002A	10/19/2011 20:02	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112900017A	10/21/2011 05:34	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112900017A	10/18/2011 10:15	Denise L Trimby	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910002A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1

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

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

Sample Description: SL-011-SA3-SB-4.0-5.0RL MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435694
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01RLR

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900025A	10/17/2011 20:55	Elizabeth J Marin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/24/2011 19:29	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112910012A	10/20/2011 23:15	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112910012A	10/18/2011 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900025A	10/17/2011 18:30	Elizabeth J Marin	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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

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Analysis Report

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Page 1 of 3

Sample Description: SL-011-SA3-SB-4.0-5.0RL LCS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435695
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01RLQ

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	120	60	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	110	J 40	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	80	U 80	240	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	80	U 80	240	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	110	J 40	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	110	J 40	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	110	J 40	120	1000000 0	1
10132	HMX	2691-41-0	110	J 100	300	1000000 0	1
10132	Nitrobenzene	98-95-3	100	J 40	120	1000000 0	1
10132	Nitroglycerin	55-63-0	2,100	J 800	2,400	1000000 0	1
10132	2-Nitrotoluene	88-72-2	150	80	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	130	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	130	80	120	1000000 0	1
10132	PETN	78-11-5	2,500	800	2,400	1000000 0	1
10132	RDX	121-82-4	81	J 50	120	1000000 0	1
10132	Tetryl	479-45-8	75	J 61	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	110	J 40	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	100	J 40	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	1,800	600	1,500		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0	U 1.0	3.3		1
10225	Aroclor 5442	12642-23-8	1.0	U 1.0	3.3		1
10225	Aroclor 5460	11126-42-4	1.0	U 1.0	3.3		1
10225	PCB-1016	12674-11-2	1.7	J 0.33	1.7		1
10225	PCB-1221	11104-28-2	0.33	U 0.33	1.7		1
10225	PCB-1232	11141-16-5	0.33	U 0.33	1.7		1
10225	PCB-1242	53469-21-9	0.33	U 0.33	1.7		1
10225	PCB-1248	12672-29-6	0.33	U 0.33	1.7		1

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

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

Sample Description: SL-011-SA3-SB-4.0-5.0RL LCS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435695
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01RLQ

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.33 U	0.33	1.7		1
10225	PCB-1260	11096-82-5	1.8	0.39	1.7		1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7		1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	570	100	500		1
10501	Isopropanol	67-63-0	530	100	500		1
10501	Methanol	67-56-1	580	100	500		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 J	1.5	3.5		1
10318	o-Terphenyl	84-15-1	1.8 J	1.5	3.5		1
10318	p-Terphenyl	92-94-4	1.6 J	1.5	3.5		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.40 U	0.40	1.2		1
10199	EFH (C15-C20)	n.a.	0.72 J	0.40	1.2		1
10199	EFH (C21-C30)	n.a.	1.2 J	0.40	1.2		1
10199	EFH (C30 - C40)	n.a.	1.7	0.40	1.2		1
10199	EFH (C8-C11)	n.a.	0.40 U	0.40	1.2		1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 20:53	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910002A	10/19/2011 20:12	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112900017A	10/21/2011 05:53	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112900017A	10/18/2011 10:15	Denise L Trimby	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910002A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900025A	10/17/2011 21:12	Elizabeth J Marin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/21/2011 23:27	Robert Brown	1

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

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



Analysis Report

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

Page 3 of 3

Sample Description: SL-011-SA3-SB-4.0-5.0RL LCS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435695
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01RLQ

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112910012A	10/20/2011 22:03	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112910012A	10/18/2011 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900025A	10/17/2011 18:30	Elizabeth J Marin	1

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

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

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6702 SDG#: DE267-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	17.4 U	17.4	34.8		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	170	U 170	520		1
04688	Benzyl alcohol	100-51-6	170	U 170	520		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170		1
04688	4-Chloroaniline	106-47-8	69	U 69	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520		1
04688	2,4-Dinitrophenol	51-28-5	350	U 350	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	35	J 17	350		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	35	U 35	170		1
04688	4-Methylphenol	106-44-5	35	U 35	170		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	35	U 35	170		1
04688	4-Nitroaniline	100-01-6	69	U 69	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	520		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1

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

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

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6702 SDG#: DE267-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U 170	520		1
04688	Phenol	108-95-2	18	J 17	170		1
04688	Tetralin	119-64-2	170	U 170	170		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	170		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	170		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69 U	0.69	1.7		1
10138	Acenaphthylene	208-96-8	0.34 U	0.34	1.7		1
10138	Anthracene	120-12-7	0.34 U	0.34	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.69 U	0.69	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.69 U	0.69	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	0.69 U	0.69	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	0.69 U	0.69	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	1.3 J	0.69	1.7		1
10138	Butylbenzylphthalate	85-68-7	6.2 U	6.2	19		1
10138	Di-n-butylphthalate	84-74-2	6.2 U	6.2	19		1
10138	Chrysene	218-01-9	0.82 J	0.34	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.69 U	0.69	1.7		1
10138	Diethylphthalate	84-66-2	6.2 U	6.2	19		1
10138	Dimethylphthalate	131-11-3	6.2 U	6.2	19		1
10138	Fluoranthene	206-44-0	1.6 J	0.69	1.7		1
10138	Fluorene	86-73-7	0.69 U	0.69	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.69 U	0.69	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.69 U	0.69	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.69 U	0.69	1.7		1
10138	Naphthalene	91-20-3	0.70 J	0.69	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.69 U	0.69	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.2 U	6.2	19		1
10138	Phenanthrene	85-01-8	0.77 J	0.69	1.7		1
10138	Pyrene	129-00-0	1.2 J	0.69	1.7		1
GC Volatiles	TPH GRO	SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
	mod						
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.1		26.32
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	

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

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

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6702 SDG#: DE267-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*		Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg		ug/kg		ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	60	U	60		120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	40	U	40		120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	80	U	80		240	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	80	U	80		240	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	40	U	40		120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	40	U	40		120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	40	U	40		120	1000000 0	1
10132	HMX	2691-41-0	100	U	100		300	1000000 0	1
10132	Nitrobenzene	98-95-3	40	U	40		120	1000000 0	1
10132	Nitroglycerin	55-63-0	800	U	800		2,400	1000000 0	1
10132	2-Nitrotoluene	88-72-2	80	U	80		120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100	U	100		120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	80	U	80		120	1000000 0	1
10132	PETN	78-11-5	800	U	800		2,400	1000000 0	1
10132	RDX	121-82-4	50	U	50		120	1000000 0	1
10132	Tetryl	479-45-8	61	U	61		120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	40	U	40		120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	40	U	40		120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg		ug/kg		ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	630	U	630		1,600		1
Pesticides/PCBs		SW-846 8082	ug/kg		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0		3.4		1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0		3.4		1
10225	Aroclor 5460	11126-42-4	1.0	U	1.0		3.4		1
10225	PCB-1016	12674-11-2	0.34	U	0.34		1.8		1
10225	PCB-1221	11104-28-2	0.34	U	0.34		1.8		1
10225	PCB-1232	11141-16-5	0.34	U	0.34		1.8		1
10225	PCB-1242	53469-21-9	0.34	U	0.34		1.8		1
10225	PCB-1248	12672-29-6	0.34	U	0.34		1.8		1

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

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6702 SDG#: DE267-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.8		1
10225	PCB-1260	11096-82-5	0.67 J	0.41	1.8		1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	520		1
10501	Isopropanol	67-63-0	100 U	100	520		1
10501	Methanol	67-56-1	100 U	100	520		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.2 U	5.2	10		1
08283	Ethylene glycol	107-21-1	5.2 U	5.2	10		1
08283	Propylene glycol	57-55-6	5.2 U	5.2	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.7		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.7		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.7		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	1.0 J	0.42	1.3		1
10199	EFH (C15-C20)	n.a.	0.70 J	0.42	1.3		1
10199	EFH (C21-C30)	n.a.	5.4	0.42	1.3		1
10199	EFH (C30 - C40)	n.a.	21	0.42	1.3		1
10199	EFH (C8-C11)	n.a.	0.42 U	0.42	1.3		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	9,850	6.32	20.9		1
07914	Boron	7440-42-8	3.77 J	0.376	5.22		1
01650	Calcium	7440-70-2	6,910	2.61	20.9		1
01654	Iron	7439-89-6	18,400	2.73	20.9		1
01656	Lithium	7439-93-2	28.1	0.65	2.1		1
01657	Magnesium	7439-95-4	3,700	0.460	10.4		1
06958	Manganese	7439-96-5	250	0.0376	0.522		1
10145	Phosphorus	7723-14-0	276	0.366	10.4		1
01662	Potassium	7440-09-7	2,200	11.8	52.2		1
01667	Sodium	7440-23-5	122	6.22	104		1
07968	Strontium	7440-24-6	24.4	0.0261	0.522		1
06969	Tin	7440-31-5	2.77 J	0.334	10.4		1
06970	Titanium	7440-32-6	1,130	0.0727	1.02		1
10146	Zirconium	7440-67-7	3.08 J	0.481	5.22		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	

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

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

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6702 SDG#: DE267-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0773 U	0.0773	0.209		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.62	0.0836	0.418		2
06126	Barium	7440-39-3	53.8	0.111	0.418		2
06127	Beryllium	7440-41-7	0.434	0.0167	0.104		2
06128	Cadmium	7440-43-9	0.0640 J	0.0460	0.104		2
06131	Chromium	7440-47-3	11.4	0.125	0.418		2
06132	Cobalt	7440-48-4	4.50	0.0209	0.104		2
06133	Copper	7440-50-8	6.05	0.0836	0.418		2
06135	Lead	7439-92-1	4.34	0.0107	0.209		2
06138	Molybdenum	7439-98-7	0.325	0.0522	0.104		2
06139	Nickel	7440-02-0	7.27	0.104	0.418		2
06141	Selenium	7782-49-2	0.0606 U	0.0606	0.418		2
06142	Silver	7440-22-4	0.0188 J	0.0148	0.104		2
06145	Thallium	7440-28-0	0.193	0.0313	0.104		2
06148	Vanadium	7440-62-2	24.5	0.0230	0.104		2
06149	Zinc	7440-66-6	46.8	0.585	3.13		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0073 U	0.0073	0.104		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.5	0.85	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.9	0.85	1.6		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.3		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.26 J	0.21	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.51		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.22	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	4.3	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

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

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

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6702 SDG#: DE267-02

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-096-SA7-SB-2.5.
The encores for this sample were received on 10/14/11 at 9:15.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11290SLD026	11/01/2011 22:07	Matthew S Woods	1
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 15:15	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11287SLB026	10/18/2011 10:46	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11290SLD026	10/18/2011 06:55	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11287SLB026	10/14/2011 10:30	Olivia Arosemena	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16B	10/18/2011 20:44	Carrie E Miller	26.32
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128725848	10/14/2011 13:10	Stephanie A Sanchez	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128725848	10/14/2011 13:11	Stephanie A Sanchez	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 21:36	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910002A	10/19/2011 20:21	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112900017A	10/21/2011 06:11	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112900017A	10/18/2011 10:15	Denise L Trimby	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910002A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900025A	10/17/2011 19:49	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112930029A	10/20/2011 20:40	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/22/2011 01:18	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112910012A	10/20/2011 22:27	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112910012A	10/18/2011 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900025A	10/17/2011 18:30	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112930029A	10/20/2011 16:05	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1

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

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

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6702 SDG#: DE267-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01645	Phosphorus	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112975708004	10/25/2011 14:14	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	112875708002	10/24/2011 01:20	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112871026001D	10/18/2011 05:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112871026001C	10/19/2011 18:35	Parker D Lindstrom	2
06139	Nickel	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112871026001B	10/18/2011 05:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112871026001A	10/18/2011 05:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112875711001	10/17/2011 19:03	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112875708002	10/17/2011 10:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112975708004	10/24/2011 21:53	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112871026001	10/17/2011 11:24	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112875711001	10/17/2011 13:00	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201A	10/27/2011 11:00	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11299621201A	10/27/2011 11:00	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202B	10/20/2011 07:44	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 15:48	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201A	10/21/2011 08:07	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201A	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202B	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201A	10/20/2011 15:35	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402A	10/26/2011 15:00	Michele L Graham	1

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Analysis Report

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

Page 8 of 8

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6702 SDG#: DE267-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435697
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6703 SDG#: DE267-03FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	16.9 U	16.9	33.8		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	510		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400		1
04688	Benzoic acid	65-85-0	170	U 170	510		1
04688	Benzyl alcohol	100-51-6	170	U 170	510		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170		1
04688	4-Chloroaniline	106-47-8	68	U 68	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170		1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	510		1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	68	U 68	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	510		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	34	U 34	170		1
04688	4-Methylphenol	106-44-5	34	U 34	170		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	34	U 34	170		1
04688	4-Nitroaniline	100-01-6	68	U 68	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	510		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1

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Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435697
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6703 SDG#: DE267-03FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U 170	510		1
04688	Phenol	108-95-2	17	U 17	170		1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170		1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	4,6-dinitro-2-methylphenol						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.67 U	0.67	1.7		1
10138	Acenaphthylene	208-96-8	0.34 U	0.34	1.7		1
10138	Anthracene	120-12-7	0.34 U	0.34	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.67 U	0.67	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.67 U	0.67	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	0.67 U	0.67	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	0.88 J	0.67	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	0.67 U	0.67	1.7		1
10138	Butylbenzylphthalate	85-68-7	6.0 U	6.0	18		1
10138	Di-n-butylphthalate	84-74-2	6.0 U	6.0	18		1
10138	Chrysene	218-01-9	0.34 U	0.34	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.67 U	0.67	1.7		1
10138	Diethylphthalate	84-66-2	6.0 U	6.0	18		1
10138	Dimethylphthalate	131-11-3	6.0 U	6.0	18		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.0 U	6.0	18		1
10138	Fluoranthene	206-44-0	0.67 U	0.67	1.7		1
10138	Fluorene	86-73-7	0.67 U	0.67	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.67 U	0.67	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.67 U	0.67	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.67 U	0.67	1.7		1
10138	Naphthalene	91-20-3	0.67 U	0.67	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.67 U	0.67	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.0 U	6.0	18		1
10138	Phenanthrene	85-01-8	0.67 U	0.67	1.7		1
10138	Pyrene	129-00-0	0.67 U	0.67	1.7		1
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.1		27.35
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	60 U	60	120	1000000 0	1

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Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435697
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6703 SDG#: DE267-03FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	40 U	40	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	80 U	80	240	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	80 U	80	240	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	40 U	40	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	40 U	40	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	40 U	40	120	1000000 0	1
10132	HMX	2691-41-0	100 U	100	300	1000000 0	1
10132	Nitrobenzene	98-95-3	40 U	40	120	1000000 0	1
10132	Nitroglycerin	55-63-0	800 U	800	2,400	1000000 0	1
10132	2-Nitrotoluene	88-72-2	80 U	80	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100 U	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	80 U	80	120	1000000 0	1
10132	PETN	78-11-5	800 U	800	2,400	1000000 0	1
10132	RDX	121-82-4	50 U	50	120	1000000 0	1
10132	Tetryl	479-45-8	61 U	61	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	40 U	40	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	40 U	40	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	610 U	610	1,500		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4		1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4		1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4		1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.7		1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.7		1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.7		1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.7		1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.7		1
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.7		1
10225	PCB-1260	11096-82-5	1.2 J	0.40	1.7		1

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Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435697
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6703 SDG#: DE267-03FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.7		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.7		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	510		1
10501	Isopropanol	67-63-0	100 U	100	510		1
10501	Methanol	67-56-1	100 U	100	510		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.1 U	5.1	10		1
08283	Ethylene glycol	107-21-1	5.1 U	5.1	10		1
08283	Propylene glycol	57-55-6	5.1 U	5.1	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.5 U	1.5	3.6		1
10318	o-Terphenyl	84-15-1	1.5 U	1.5	3.6		1
10318	p-Terphenyl	92-94-4	1.5 U	1.5	3.6		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.41 U	0.41	1.2		1
10199	EFH (C15-C20)	n.a.	0.48 J	0.41	1.2		1
10199	EFH (C21-C30)	n.a.	2.4	0.41	1.2		1
10199	EFH (C30 - C40)	n.a.	6.5	0.41	1.2		1
10199	EFH (C8-C11)	n.a.	0.41 U	0.41	1.2		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,500	6.02	19.9		1
07914	Boron	7440-42-8	3.21 J	0.358	4.97		1
01650	Calcium	7440-70-2	7,000	2.49	19.9		1
01654	Iron	7439-89-6	19,400	2.60	19.9		1
01656	Lithium	7439-93-2	28.7	0.62	2.0		1
01657	Magnesium	7439-95-4	3,920	0.438	9.95		1
06958	Manganese	7439-96-5	264	0.0358	0.497		1
10145	Phosphorus	7723-14-0	291	0.348	9.95		1
01662	Potassium	7440-09-7	2,320	11.2	49.7		1
01667	Sodium	7440-23-5	125	5.92	99.5		1
07968	Strontium	7440-24-6	26.1	0.0249	0.497		1
06969	Tin	7440-31-5	2.81 J	0.318	9.95		1
06970	Titanium	7440-32-6	1,030	0.0713	1.00		1
10146	Zirconium	7440-67-7	2.91 J	0.458	4.97		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0743 U	0.0743	0.201		2

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

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

Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435697
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6703 SDG#: DE267-03FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	3.83	0.0804	0.402		2
06126	Barium	7440-39-3	63.0	0.106	0.402		2
06127	Beryllium	7440-41-7	0.471	0.0161	0.100		2
06128	Cadmium	7440-43-9	0.0958 J	0.0442	0.100		2
06131	Chromium	7440-47-3	12.6	0.121	0.402		2
06132	Cobalt	7440-48-4	4.87	0.0201	0.100		2
06133	Copper	7440-50-8	6.91	0.0804	0.402		2
06135	Lead	7439-92-1	5.20	0.0102	0.201		2
06138	Molybdenum	7439-98-7	0.363	0.0502	0.100		2
06139	Nickel	7440-02-0	8.45	0.100	0.402		2
06141	Selenium	7782-49-2	0.0591 J	0.0583	0.402		2
06142	Silver	7440-22-4	0.0334 J	0.0143	0.100		2
06145	Thallium	7440-28-0	0.215	0.0301	0.100		2
06148	Vanadium	7440-62-2	26.0	0.0221	0.100		2
06149	Zinc	7440-66-6	49.4	0.563	3.01		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0068 U	0.0068	0.0971		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2	0.80	1.0		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.96 J	0.80	1.5		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.2 U	9.2	30.7		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.20 U	0.20	1.0		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.18 U	0.18	0.50		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	8.65	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	2.4	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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

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

Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435697
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6703 SDG#: DE267-03FD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11290SLD026	11/01/2011 22:26	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11290SLE026	10/20/2011 15:40	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11287SLB026	10/18/2011 11:19	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11290SLD026	10/18/2011 06:55	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11287SLB026	10/14/2011 10:30	Olivia Arosemena	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLE026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11290B16B	10/18/2011 21:21	Carrie E Miller	27.35
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128625838	10/13/2011 12:41	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128625838	10/13/2011 12:41	Larry E Bevins	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880014A	10/20/2011 23:43	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910002A	10/19/2011 20:31	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112900017A	10/21/2011 06:30	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112900017A	10/18/2011 10:15	Denise L Trimby	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910002A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880014A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900025A	10/17/2011 20:06	Elizabeth J Marin	1
08283	19a Glycols by 8015B modified	SW-846 8015B	1	112930029A	10/20/2011 20:53	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112870007A	10/22/2011 00:56	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel modified	SW-846 8015B	1	112910012A	10/20/2011 22:51	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112910012A	10/18/2011 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	112870007A	10/14/2011 13:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900025A	10/17/2011 18:30	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112930029A	10/20/2011 16:05	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1

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

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

Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435697
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6703 SDG#: DE267-03FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112975708004	10/25/2011 14:26	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	112875708002	10/24/2011 01:31	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112871026001D	10/18/2011 05:23	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112871026001C	10/19/2011 18:37	Parker D Lindstrom	2
06139	Nickel	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112871026001B	10/18/2011 05:23	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112871026001A	10/18/2011 05:23	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112875711001	10/17/2011 19:04	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112875708002	10/17/2011 10:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112975708004	10/24/2011 21:53	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112871026001	10/17/2011 11:24	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112875711001	10/17/2011 13:00	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201A	10/27/2011 11:45	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11299621201A	10/27/2011 11:45	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11292621202B	10/20/2011 08:07	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 16:02	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201A	10/21/2011 08:08	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201A	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11292621202B	10/19/2011 08:05	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201A	10/20/2011 15:35	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402A	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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

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

Sample Description: EB-SA3-SB-101211 Water
SSFL Area IV Collocated Soil Sampling
EB-SA3-SB-101211

LLI Sample # WW 6435698
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:23

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6704 SDG#: DE267-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	2.54	0.508	1.02		1
The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.							
N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result.							

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11286WAH026	10/17/2011 18:53	Matthew S Woods	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11286WAH026	10/14/2011 03:10	David V Hershey Jr	1

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

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

Sample Description: TB-101211 Water
SSFL Area IV Collocated Soil Sampling
TB-101211

LLI Sample # WW 6435699
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 08:00

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6705 SDG#: DE267-05TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	1.03	0.492	0.983		1
The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.							
N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result.							

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11286WAH026	10/17/2011 19:12	Matthew S Woods	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11286WAH026	10/14/2011 03:10	David V Hershey Jr	1

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

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

Sample Description: TB-101211 Sand
SSFL Area IV Collocated Soil Sampling
TB-101211

LLI Sample # SW 6435700
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 08:00

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6706 SDG#: DE267-06TB

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	16.7 U	16.7	33.3		1
Wet Chemistry EPA 160.3 modified			%	%	%	%	
11624	Moisture Content by 160.3	n.a.	0.50 U	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11290SLD026	11/01/2011 22:45	Matthew S Woods	1
11630	NDMA Soil Microwave	SW-846 3546	1	11290SLD026	10/18/2011 06:55	Katheryne V Sponheimer	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11291162401B	10/18/2011 21:20	Scott W Freisher	1

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

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



Analysis Report

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

Page 1 of 1

Sample Description: TB-101211 Water
SSFL Area IV Collocated Soil Sampling
TB-101211

LLI Sample # WW 6435701
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 08:00

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6707 SDG#: DE267-07TB

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	11287A20A	10/14/2011 12:01	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	11287A20A	10/14/2011 12:01	Marie D John	1

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

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

Sample Description: EB-SA3-SB-101211 Water
SSFL Area IV Collocated Soil Sampling
EB-SA3-SB-101211

LLI Sample # WW 6435702
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6708 SDG#: DE267-08EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	2.69	0.534	1.07		1
The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.							
N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result. This sample was re-extracted, and n-nitrosodimethylamine was again detected in the method blank and sample. The data reported here is from the initial extraction of the sample.							
GC/MS Semivolatiles SW-846 8270C			ug/l	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1	U	1	5	1
04678	Benzidine	92-87-5	19	U	19	57	1
04678	Benzoic acid	65-85-0	6	U	6	14	1
04678	Benzyl alcohol	100-51-6	5	U	5	14	1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5	1
04678	2-butoxy-Ethanol	111-76-2	48	U	48	48	1
04678	Carbazole	86-74-8	1	U	1	5	1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5	1
04678	4-Chloroaniline	106-47-8	1	U	1	5	1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5	1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5	1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5	1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5	1
04678	2-Chlorophenol	95-57-8	1	U	1	5	1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5	1
04678	Dibenzofuran	132-64-9	1	U	1	5	1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5	1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5	1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5	1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5	1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5	1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	10	1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	10	1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	14	1
04678	2,4-Dinitrophenol	51-28-5	10	U	10	29	1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5	1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5	1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5	1
04678	Hexachlorobenzene	118-74-1	1	U	1	5	1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5	1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	14	1
04678	Hexachloroethane	67-72-1	1	U	1	5	1
04678	Isophorone	78-59-1	1	U	1	5	1
04678	2-Methylphenol	95-48-7	1	U	1	5	1
04678	4-Methylphenol	106-44-5	2	U	2	5	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1	U	1	5	1

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Sample Description: EB-SA3-SB-101211 Water
SSFL Area IV Collocated Soil Sampling
EB-SA3-SB-101211

LLI Sample # WW 6435702
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6708 SDG#: DE267-08EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	3-Nitroaniline	99-09-2	1 U	1	5		1
04678	4-Nitroaniline	100-01-6	1 U	1	5		1
04678	Nitrobenzene	98-95-3	1 U	1	5		1
04678	2-Nitrophenol	88-75-5	1 U	1	5		1
04678	4-Nitrophenol	100-02-7	10 U	10	29		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3 U	3	14		1
04678	Phenol	108-95-2	1 U	1	5		1
04678	2-phenoxy-Ethanol	122-99-6	48 U	48	48		1
04678	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1 U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1 U	1	5		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.011 U	0.011	0.055		1
10137	Acenaphthylene	208-96-8	0.011 U	0.011	0.055		1
10137	Anthracene	120-12-7	0.011 U	0.011	0.055		1
10137	Benzo(a)anthracene	56-55-3	0.011 U	0.011	0.055		1
10137	Benzo(a)pyrene	50-32-8	0.011 U	0.011	0.055		1
10137	Benzo(b)fluoranthene	205-99-2	0.011 U	0.011	0.055		1
10137	Benzo(g,h,i)perylene	191-24-2	0.011 U	0.011	0.055		1
10137	Benzo(k)fluoranthene	207-08-9	0.011 U	0.011	0.055		1
10137	Butylbenzylphthalate	85-68-7	0.055 U	0.055	1.1		1
10137	Di-n-butylphthalate	84-74-2	0.28 J	0.055	1.1		1
10137	Chrysene	218-01-9	0.011 U	0.011	0.055		1
10137	Dibenz(a,h)anthracene	53-70-3	0.011 U	0.011	0.055		1
10137	Diethylphthalate	84-66-2	0.14 J	0.055	1.1		1
10137	Dimethylphthalate	131-11-3	0.055 U	0.055	1.1		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.055 U	0.055	1.1		1
10137	Fluoranthene	206-44-0	0.011 U	0.011	0.055		1
10137	Fluorene	86-73-7	0.011 U	0.011	0.055		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.011 U	0.011	0.055		1
10137	1-Methylnaphthalene	90-12-0	0.011 U	0.011	0.055		1
10137	2-Methylnaphthalene	91-57-6	0.011 U	0.011	0.055		1
10137	Naphthalene	91-20-3	0.13 U	0.033	0.055		1
10137	N-Nitrosodimethylamine	62-75-9	0.011 U	0.011	0.055		1
10137	Di-n-octylphthalate	117-84-0	0.055 U	0.055	1.1		1
10137	Phenanthrene	85-01-8	0.033 U	0.033	0.055		1
10137	Pyrene	129-00-0	0.011 U	0.011	0.055		1
GC Volatiles	TPH GRO	SW-8015B	ug/l	ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50		1
Explosives	SW-846 8330A		ug/l	ug/l	ug/l	ug/l	

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SSFL Area IV Collocated Soil Sampling
EB-SA3-SB-101211

LLI Sample # WW 6435702
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6708 SDG#: DE267-08EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/l		ug/l	ug/l	ug/l	
10131	4-Amino-2,6-Dinitrotoluene	19406-51-0	0.30	U	0.30	0.60	1000000 0	1
10131	2-Amino-4,6-Dinitrotoluene	35572-78-2	0.20	U	0.20	0.60	1000000 0	1
10131	2,6-Diamino-4-nitrotoluene	59229-75-3	0.20	U	0.20	0.60	1000000 0	1
10131	2,4-Diamino-6-nitrotoluene	6629-29-4	0.20	U	0.20	0.60	1000000 0	1
10131	1,3-Dinitrobenzene	99-65-0	0.20	U	0.20	0.60	1000000 0	1
10131	2,4-Dinitrotoluene	121-14-2	0.20	U	0.20	0.60	1000000 0	1
10131	2,6-Dinitrotoluene	606-20-2	0.20	U	0.20	0.60	1000000 0	1
10131	HMX	2691-41-0	0.65	U	0.65	2.0	1000000 0	1
10131	Nitrobenzene	98-95-3	0.20	U	0.20	0.60	1000000 0	1
10131	Nitroglycerin	55-63-0	5.2	U	5.2	15	1000000 0	1
10131	2-Nitrotoluene	88-72-2	0.20	U	0.20	0.60	1000000 0	1
10131	3-Nitrotoluene	99-08-1	0.40	U	0.40	1.2	1000000 0	1
10131	4-Nitrotoluene	99-99-0	0.60	U	0.60	1.2	1000000 0	1
10131	PETN	78-11-5	6.0	U	6.0	18	1000000 0	1
10131	RDX	121-82-4	1.7		0.20	0.60	1000000 0	1
10131	Tetryl	479-45-8	0.40	U	0.40	0.60	1000000 0	1
10131	1,3,5-Trinitrobenzene	99-35-4	0.20	U	0.20	0.60	1000000 0	1
10131	2,4,6-Trinitrotoluene	118-96-7	0.20	U	0.20	0.60	1000000 0	1
HPLC Organics		SW-846 8315A	ug/l		ug/l	ug/l	ug/l	
04144	20b Formaldehyde 8315A	50-00-0	10	U	10	50		1
Pesticides/PCBs		SW-846 8082	ug/l		ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.51		1
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.51		1
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.51		1
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.51		1
10227	PCB-1221	11104-28-2	0.10	U	0.10	0.51		1
10227	PCB-1232	11141-16-5	0.20	U	0.20	0.51		1
10227	PCB-1242	53469-21-9	0.10	U	0.10	0.51		1
10227	PCB-1248	12672-29-6	0.10	U	0.10	0.51		1

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EB-SA3-SB-101211

LLI Sample # WW 6435702
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Collected: 10/12/2011 14:00

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E6708 SDG#: DE267-08EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/l		ug/l	ug/l	ug/l	
10227	PCB-1254	11097-69-1	0.10	U	0.10	0.51		1
10227	PCB-1260	11096-82-5	0.15	U	0.15	0.51		1
10227	PCB-1262	37324-23-5	0.20	U	0.20	0.51		1
10227	PCB-1268	11100-14-4	0.16	U	0.16	0.51		1
GC Miscellaneous		SW-846 8015B	ug/l		ug/l	ug/l	ug/l	
06624	Ethanol	64-17-5	200	U	200	1,000		1
06624	Isopropanol	67-63-0	200	U	200	1,000		1
06624	Methanol	67-56-1	200	U	200	1,000		1
GC Miscellaneous		SW-846 8015B modified	mg/l		mg/l	mg/l	mg/l	
08278	Diethylene glycol	111-46-6	20	U	20	200		1
08278	Ethylene glycol	107-21-1	20	U	20	200		1
08278	Propylene glycol	57-55-6	20	U	20	200		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/l		mg/l	mg/l	mg/l	
10319	m-Terphenyl	92-06-8	0.084	U	0.084	0.26		1
10319	o-Terphenyl	84-15-1	0.084	U	0.084	0.26		1
10319	p-Terphenyl	92-94-4	0.084	U	0.084	0.26		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/l		mg/l	mg/l	mg/l	
10365	EFH (C12-C14)	n.a.	0.10	U	0.10	0.63		1
10365	EFH (C15-C20)	n.a.	0.10	U	0.10	0.63		1
10365	EFH (C21-C30)	n.a.	0.10	U	0.10	0.63		1
10365	EFH (C30 - C40)	n.a.	0.10	U	0.10	0.63		1
10365	EFH (C8-C11)	n.a.	0.10	U	0.10	0.63		1
Metals		SW-846 6010B	mg/l		mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0801	U	0.0801	0.200		1
08014	Boron	7440-42-8	0.0047	J	0.0022	0.0500		1
01750	Calcium	7440-70-2	0.0705	U	0.0705	0.200		1
01754	Iron	7439-89-6	0.0141	U	0.0141	0.200		1
01756	Lithium	7439-93-2	0.0076	U	0.0076	0.0200		1
01757	Magnesium	7439-95-4	0.0067	U	0.0067	0.100		1
07058	Manganese	7439-96-5	0.00044	U	0.00044	0.0050		1
10143	Phosphorus	7723-14-0	0.0047	U	0.0047	0.100		1
01762	Potassium	7440-09-7	0.0874	U	0.0874	0.500		1
01767	Sodium	7440-23-5	0.0647	U	0.0647	1.00		1
08068	Strontium	7440-24-6	0.00022	U	0.00022	0.0050		1
07069	Tin	7440-31-5	0.0043	U	0.0043	0.0200		1
07070	Titanium	7440-32-6	0.00046	U	0.00046	0.0100		1
10144	Zirconium	7440-67-7	0.0042	U	0.0042	0.0500		1
		SW-846 6020	mg/l		mg/l	mg/l	mg/l	

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EB-SA3-SB-101211

LLI Sample # WW 6435702
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Account # 13013

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E6708 SDG#: DE267-08EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00042 U	0.00042	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00069 U	0.00069	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000080 U	0.000080	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00027 U	0.00027	0.0020		1
06042	Silver	7440-22-4	0.000098 U	0.000098	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00018 U	0.00018	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
		SW-846 7470A	mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000026 U	0.000026	0.00020		1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
00368	11b Anions by 300.0 - Nitrate	14797-55-8	0.050 U	0.050	0.10		1
		EPA 314.0	ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
		SW-846 7199	ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1
The correlation coefficient of the calibration curve is below the method requirement of 0.999 with a result of 0.995. The sample was rerun outside of the 24 hour holding time on 10/14/2011. The result of the second trial is also 5.0 U ug/l.							
		SW-846 9012B	mg/l	mg/l	mg/l	mg/l	
08255	16b Cyanide by 9012B	57-12-5	0.0050 U	0.0050	0.010		1
		SW-846 9040B	Std. Units	Std. Units	Std. Units	Std. Units	
00200	17b pH by 9040B	n.a.	5.5	0.010	0.010		1

General Sample Comments

State of California Lab Certification No. 2501

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

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SSFL Area IV Collocated Soil Sampling
EB-SA3-SB-101211

LLI Sample # WW 6435702
LLI Group # 1271034
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Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

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Submitted: 10/13/2011 09:00

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E6708 SDG#: DE267-08EB*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11286WAH026	10/17/2011 19:31	Matthew S Woods	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	11290WAB026	10/18/2011 07:42	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11290WAJ026	10/21/2011 11:53	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	11290WAB026	10/17/2011 17:30	Nicholas W Shroyer	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	11290WAJ026	10/18/2011 12:00	Olivia I Santiago	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11286WAH026	10/14/2011 03:10	David V Hershey Jr	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	11287A20A	10/14/2011 12:23	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	11287A20A	10/14/2011 12:23	Marie D John	1
10131	15b Energetics by 8330A	SW-846 8330A	1	112900016A	10/20/2011 07:27	James H Place	1
04144	20b Formaldehyde 8315A	SW-846 8315A	1	112860019A	10/14/2011 21:19	James H Place	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	112900011A	10/20/2011 14:51	Jessica L Miller	1
11117	PCB Waters Extraction	SW-846 3510C	1	112900011A	10/18/2011 02:30	Sherry L Morrow	1
01013	Formaldehyde Extraction	SW-846 8315A	1	112860019A	10/14/2011 08:35	Denise L Trimby	1
11122	Energetics Extraction	SW-846 8330	1	112900016A	10/18/2011 16:45	Kelli M Barto	1
06624	18b Alcohols by 8015B	SW-846 8015B	1	112870020A	10/14/2011 20:51	Elizabeth J Marin	1
08278	19b Glycols by 8015B	SW-846 8015B modified	1	112910030A	10/18/2011 21:07	Tyler O Griffin	1
10319	22b Terphenyls by 8015B	SW-846 8015B	1	112880013A	10/21/2011 13:08	Robert Brown	1
10365	9b TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112900022A	10/20/2011 18:51	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	112900022A	10/18/2011 08:45	Catherine R Wiker	1
10304	Terphenyls water prep	SW-846 3510C	1	112880013A	10/17/2011 10:00	Catherine R Wiker	1
01743	Aluminum	SW-846 6010B	1	112921848006	10/24/2011 02:09	Tara L Snyder	1
08014	Boron	SW-846 6010B	1	112921848006	10/21/2011 19:57	John P Hook	1
01750	Calcium	SW-846 6010B	1	112921848006	10/24/2011 02:09	Tara L Snyder	1
01754	Iron	SW-846 6010B	1	112921848006	10/24/2011 02:09	Tara L Snyder	1
01756	Lithium	SW-846 6010B	1	112921848006	10/21/2011 19:57	John P Hook	1
01757	Magnesium	SW-846 6010B	1	112921848006	10/24/2011 02:09	Tara L Snyder	1
07058	Manganese	SW-846 6010B	1	112921848006	10/21/2011 19:57	John P Hook	1
10143	Phosphorus	SW-846 6010B	1	112921848006	10/21/2011 19:57	John P Hook	1
01762	Potassium	SW-846 6010B	1	112921848006	10/21/2011 19:57	John P Hook	1
01767	Sodium	SW-846 6010B	1	112921848006	10/21/2011 19:57	John P Hook	1
08068	Strontium	SW-846 6010B	1	112921848006	10/21/2011 19:57	John P Hook	1
07069	Tin	SW-846 6010B	1	112921848006	10/21/2011 19:57	John P Hook	1
07070	Titanium	SW-846 6010B	1	112921848006	10/21/2011 19:57	John P Hook	1
10144	Zirconium	SW-846 6010B	1	112921848006	10/21/2011 19:57	John P Hook	1
06024	Antimony	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06026	Barium	SW-846 6020	1	112926050003D	10/24/2011 09:45	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06033	Copper	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06035	Lead	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1

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

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

Sample Description: EB-SA3-SB-101211 Water
SSFL Area IV Collocated Soil Sampling
EB-SA3-SB-101211

LLI Sample # WW 6435702
LLI Group # 1271034
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

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

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6708 SDG#: DE267-08EB*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06038	Molybdenum	SW-846 6020	1	112926050003C	10/24/2011 09:45	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	112926050003B	10/24/2011 09:45	Choon Y Tian	1
06042	Silver	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	112926050003A	10/24/2011 09:45	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	112925713004	10/20/2011 19:29	Nelli S Markaryan	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	112921848006	10/20/2011 09:39	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	112926050003	10/20/2011 09:36	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	112925713004	10/19/2011 14:43	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	11286196901C	10/14/2011 00:08	Ashley M Adams	1
00368	11b Anions by 300.0 - Nitrate	EPA 300.0	1	11286196901C	10/14/2011 00:08	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	11286281101A	10/13/2011 21:47	Elyse P Brunstetter	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	11286281401A	10/13/2011 11:23	Elyse P Brunstetter	1
08255	16b Cyanide by 9012B	SW-846 9012B	1	11290117101B	10/17/2011 20:58	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012B	1	11290117101B	10/17/2011 09:45	Nancy J Shoop	1
00200	17b pH by 9040B	SW-846 9040B	1	11286020001A	10/13/2011 21:35	Luz M Groff	1

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11286WAH026 N-Nitrosodimethylamine	Sample number(s): 6435698-6435699, 6435702 1.14	0.500	1.00	ng/l	98	103	70-130	5	30
Batch number: 11287SLB026	Sample number(s): 6435690-6435692, 6435696-6435697								
Acenaphthene	0.67 U	0.67	1.7	ug/kg	100		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	89		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	95		73-113		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	96		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	92		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	99		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	120		66-150		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	90		54-142		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	90		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	86		75-137		
Chrysene	0.33 U	0.33	1.7	ug/kg	97		73-114		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	111		53-138		
Diethylphthalate	6.0 U	6.0	18	ug/kg	93		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	95		79-121		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	99		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	95		64-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	96		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	112		56-134		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	88		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	88		62-120		
Naphthalene	0.67 U	0.67	1.7	ug/kg	92		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	89		55-118		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	96		68-162		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	93		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	95		72-119		
Batch number: 11290SLD026 N-Nitrosodimethylamine	Sample number(s): 6435690-6435692, 6435696-6435697, 6435700 16.7 U	16.7	33.3	ng/kg	102		70-130		
Batch number: 11290SLE026	Sample number(s): 6435690-6435692, 6435696-6435697								
Acenaphthene	17 U	17.	170	ug/kg	98		76-111		
Acenaphthylene	17 U	17.	170	ug/kg	105		75-122		
Aniline	170 U	170.	500	ug/kg	74		20-115		
Anthracene	17 U	17.	170	ug/kg	98		76-112		
Benzidine	1,200 U	1,200.	3,300	ug/kg	43		15-121		
Benzo(a)anthracene	17 U	17.	170	ug/kg	98		73-112		
Benzo(a)pyrene	17 U	17.	170	ug/kg	100		65-124		
Benzo(b)fluoranthene	17 U	17.	170	ug/kg	101		61-127		
Benzo(g,h,i)perylene	17 U	17.	170	ug/kg	94		60-125		
Benzo(k)fluoranthene	17 U	17.	170	ug/kg	100		67-125		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Benzoic acid	170 U	170.	500	ug/kg	63		62-113		
Benzyl alcohol	170 U	170.	500	ug/kg	113*		68-111		
4-Bromophenyl-phenylether	17	U 17.	170	ug/kg	97		73-114		
Butylbenzylphthalate	17	U 17.	170	ug/kg	92		75-115		
Di-n-butylphthalate	17	U 17.	170	ug/kg	94		79-112		
Carbazole	17	U 17.	170	ug/kg	95		77-113		
4-Chloro-3-methylphenol	33	U 33.	170	ug/kg	112		74-119		
4-Chloroaniline	67	U 67.	170	ug/kg	47		10-110		
bis(2-Chloroethoxy)methane	17	U 17.	170	ug/kg	105		70-118		
bis(2-Chloroethyl)ether	17	U 17.	170	ug/kg	107*		70-104		
bis(2-Chloroisopropyl)ether	17	U 17.	170	ug/kg	107		62-115		
2-Chloronaphthalene	17	U 17.	170	ug/kg	71		49-128		
2-Chlorophenol	17	U 17.	170	ug/kg	109		72-112		
4-Chlorophenyl-phenylether	33	U 33.	170	ug/kg	104		74-115		
Chrysene	17	U 17.	170	ug/kg	96		76-113		
Dibenz(a,h)anthracene	17	U 17.	170	ug/kg	100		61-126		
Dibenzofuran	17	U 17.	170	ug/kg	98		74-116		
1,2-Dichlorobenzene	17	U 17.	170	ug/kg	91		74-99		
1,3-Dichlorobenzene	17	U 17.	170	ug/kg	90		70-98		
1,4-Dichlorobenzene	17	U 17.	170	ug/kg	91		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	42		10-116		
2,4-Dichlorophenol	17	U 17.	170	ug/kg	107		75-111		
Diethylphthalate	17	U 17.	170	ug/kg	99		76-111		
2,4-Dimethylphenol	33	U 33.	170	ug/kg	109		72-111		
3,5-Dimethylphenol	33	U 33.	170	ug/kg	118		83-120		
Dimethylphthalate	17	U 17.	170	ug/kg	100		77-109		
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	41*		46-120		
2,4-Dinitrophenol	330 U	330.	1,000	ug/kg	22		18-133		
2,4-Dinitrotoluene	33	U 33.	170	ug/kg	109		73-115		
2,6-Dinitrotoluene	17	U 17.	170	ug/kg	106		79-115		
1,2-Diphenylhydrazine	17	U 17.	170	ug/kg	103		71-125		
bis(2-Ethylhexyl)phthalate	17	U 17.	330	ug/kg	96		75-117		
Fluoranthene	17	U 17.	170	ug/kg	102		78-116		
Fluorene	17	U 17.	170	ug/kg	101		75-116		
Hexachlorobenzene	17	U 17.	170	ug/kg	100		73-119		
Hexachlorobutadiene	67	U 67.	170	ug/kg	93		65-117		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	92		46-115		
Hexachloroethane	17	U 17.	170	ug/kg	90		61-109		
Indeno(1,2,3-cd)pyrene	17	U 17.	170	ug/kg	97		64-119		
Isophorone	17	U 17.	170	ug/kg	109		69-110		
1-Methylnaphthalene	17	U 17.	170	ug/kg	96		74-105		
2-Methylnaphthalene	17	U 17.	170	ug/kg	98		69-109		
2-Methylphenol	33	U 33.	170	ug/kg	116*		66-110		
4-Methylphenol	33	U 33.	170	ug/kg	113		66-117		
Naphthalene	17	U 17.	170	ug/kg	96		73-106		
2-Nitroaniline	17	U 17.	170	ug/kg	107		78-116		
3-Nitroaniline	33	U 33.	170	ug/kg	99		62-109		
4-Nitroaniline	67	U 67.	170	ug/kg	75		49-98		
Nitrobenzene	17	U 17.	170	ug/kg	110		66-119		
2-Nitrophenol	17	U 17.	170	ug/kg	105		76-111		
4-Nitrophenol	170 U	170.	500	ug/kg	89		56-118		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	109*		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	106		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	96		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	101		62-137		
Pentachlorophenol	170 U	170.	500	ug/kg	86		51-117		
Phenanthrene	17 U	17.	170	ug/kg	93		77-113		
Phenol	17 U	17.	170	ug/kg	112		58-112		
Pyrene	17 U	17.	170	ug/kg	95		75-115		
Tetralin	170 U	170.	170	ug/kg					
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	95		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	104		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	102		78-111		

Batch number: 11290WAB026

Sample number(s): 6435702

Aniline	1 U	1.	5	ug/l	77	83	38-116	8	30
Benzidine	20 U	20.	60	ug/l	62	62	34-117	0	30
Benzoic acid	6 U	6.	15	ug/l	24	21	10-69	11	30
Benzyl alcohol	5 U	5.	15	ug/l	79	91	66-97	14	30
4-Bromophenyl-phenylether	1 U	1.	5	ug/l	101	103	75-115	2	30
2-butoxy-Ethanol	50 U	50.	50	ug/l					
Carbazole	1 U	1.	5	ug/l	99	103	75-120	4	30
4-Chloro-3-methylphenol	1 U	1.	5	ug/l	103	109	70-123	6	30
4-Chloroaniline	1 U	1.	5	ug/l	67	70	24-128	5	30
bis(2-Chloroethoxy)methane	1 U	1.	5	ug/l	104	109	74-124	5	30
bis(2-Chloroethyl)ether	1 U	1.	5	ug/l	101	108	77-108	7	30
bis(2-Chloroisopropyl)ether	1 U	1.	5	ug/l	98	106	62-127	8	30
2-Chloronaphthalene	2 U	2.	5	ug/l	73	81	54-132	11	30
2-Chlorophenol	1 U	1.	5	ug/l	94	100	71-114	7	30
4-Chlorophenyl-phenylether	2 U	2.	5	ug/l	101	106	77-114	5	30
Dibenzofuran	1 U	1.	5	ug/l	96	101	75-117	4	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	87	97	55-118	10	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	88	97	61-111	9	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	88	96	53-119	9	30
3,3'-Dichlorobenzidine	2 U	2.	5	ug/l	70	72	37-117	2	30
2,4-Dichlorophenol	1 U	1.	5	ug/l	102	109	77-117	7	30
2,4-Dimethylphenol	3 U	3.	10	ug/l	102	107	72-110	4	30
3,5-Dimethylphenol	3 U	3.	10	ug/l	108	113	70-130	5	30
4,6-Dinitro-2-methylphenol	5 U	5.	15	ug/l	98	102	65-126	4	30
2,4-Dinitrophenol	10 U	10.	30	ug/l	93	99	52-131	6	30
2,4-Dinitrotoluene	1 U	1.	5	ug/l	108	113	76-119	5	30
2,6-Dinitrotoluene	1 U	1.	5	ug/l	104	111	76-118	6	30
1,2-Diphenylhydrazine	1 U	1.	5	ug/l	100	103	68-127	4	30
Hexachlorobenzene	1 U	1.	5	ug/l	105	107	75-119	2	30
Hexachlorobutadiene	1 U	1.	5	ug/l	96	104	57-124	8	30
Hexachlorocyclopentadiene	5 U	5.	15	ug/l	84	90	36-118	6	30
Hexachloroethane	1 U	1.	5	ug/l	86	95	52-113	10	30
Isophorone	1 U	1.	5	ug/l	107	113	74-117	6	30
2-Methylphenol	1 U	1.	5	ug/l	86	94	58-110	9	30
4-Methylphenol	2 U	2.	5	ug/l	77	85	49-108	10	30
2-Nitroaniline	1 U	1.	5	ug/l	104	111	75-120	7	30
3-Nitroaniline	1 U	1.	5	ug/l	99	104	74-113	5	30
4-Nitroaniline	1 U	1.	5	ug/l	84	89	59-100	5	30
Nitrobenzene	1 U	1.	5	ug/l	108	114*	75-109	5	30
2-Nitrophenol	1 U	1.	5	ug/l	106	111	76-118	4	30
4-Nitrophenol	10 U	10.	30	ug/l	40	46	16-78	14	30
N-Nitroso-di-n-propylamine	1 U	1.	5	ug/l	100	108	69-110	8	30

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
N-Nitrosodiphenylamine	2 U	2.	5	ug/l	94	97	67-136	3	30
Pentachlorophenol	3 U	3.	15	ug/l	107	112*	53-110	5	30
Phenol	1 U	1.	5	ug/l	38	49	21-67	25	30
2-phenoxy-Ethanol	50 U	50.	50	ug/l					
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	96	103	71-112	7	30
2,4,5-Trichlorophenol	1 U	1.	5	ug/l	103	109*	79-107	6	30
2,4,6-Trichlorophenol	1 U	1.	5	ug/l	103	110	76-120	7	30

Batch number: 11290WJA026	Sample number(s): 6435702								
Acenaphthene	0.010 U	0.010	0.050	ug/l	98	97	74-109	2	30
Acenaphthylene	0.010 U	0.010	0.050	ug/l	97	95	70-110	2	30
Anthracene	0.010 U	0.010	0.050	ug/l	99	100	66-111	1	30
Benzo(a)anthracene	0.010 U	0.010	0.050	ug/l	101	102	72-114	0	30
Benzo(a)pyrene	0.010 U	0.010	0.050	ug/l	95	95	60-127	0	30
Benzo(b)fluoranthene	0.010 U	0.010	0.050	ug/l	98	99	58-151	1	30
Benzo(g,h,i)perylene	0.010 U	0.010	0.050	ug/l	108	108	57-131	0	30
Benzo(k)fluoranthene	0.010 U	0.010	0.050	ug/l	99	99	59-130	0	30
Butylbenzylphthalate	0.050 U	0.050	1.0	ug/l	77	78	40-138	1	30
Di-n-butylphthalate	0.050 U	0.050	1.0	ug/l	84	85	56-148	1	30
Chrysene	0.010 U	0.010	0.050	ug/l	105	105	76-116	0	30
Dibenz(a,h)anthracene	0.010 U	0.010	0.050	ug/l	109	110	55-134	0	30
Diethylphthalate	0.050 U	0.050	1.0	ug/l	91	92	37-148	1	30
Dimethylphthalate	0.050 U	0.050	1.0	ug/l	86	86	40-119	0	30
Bis(2-Ethylhexyl)phthalate	0.050 U	0.050	1.0	ug/l	102	102	57-154	0	30
Fluoranthene	0.010 U	0.010	0.050	ug/l	104	106	75-116	2	30
Fluorene	0.010 U	0.010	0.050	ug/l	105	103	75-114	2	30
Indeno(1,2,3-cd)pyrene	0.010 U	0.010	0.050	ug/l	108	108	53-158	0	30
1-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	93	94	71-117	0	30
2-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	92	92	75-115	0	30
Naphthalene	0.030 U	0.030	0.050	ug/l	95	95	72-109	0	30
N-Nitrosodimethylamine	0.010 U	0.010	0.050	ug/l	70	65	36-89	8	30
Di-n-octylphthalate	0.050 U	0.050	1.0	ug/l	87	87	57-145	1	30
Phenanthrene	0.030 U	0.030	0.050	ug/l	98	99	76-111	1	30
Pyrene	0.010 U	0.010	0.050	ug/l	92	91	69-118	0	30

Batch number: 11287A20A	Sample number(s): 6435701-6435702								
TPH-GRO S.CA water C5-C12	20 U	20.	50	ug/l	91	100	75-135	10	30

Batch number: 11290B16A	Sample number(s): 6435690-6435692								
9a TPH by EPA 8015B Gas C5-C12	0.2 U	0.2	1.0	mg/kg	80		67-119		

Batch number: 11290B16B	Sample number(s): 6435696-6435697								
9a TPH by EPA 8015B Gas C5-C12	0.2 U	0.2	1.0	mg/kg	80		67-119		

Batch number: 112880014A	Sample number(s): 6435690-6435692, 6435694-6435697								
4-Amino-2,6-Dinitrotoluene	60 U	60.	120	ug/kg	108		80-120		
2-Amino-4,6-Dinitrotoluene	40 U	40.	120	ug/kg	106		80-120		
2,6-Diamino-4-nitrotoluene	80 U	80.	240	ug/kg	85	85	54-134	0	30
2,4-Diamino-6-nitrotoluene	80 U	80.	240	ug/kg	84	85	54-134	0	30
1,3-Dinitrobenzene	40 U	40.	120	ug/kg	109		51-171		
2,4-Dinitrotoluene	40 U	40.	120	ug/kg	100		72-135		
2,6-Dinitrotoluene	40 U	40.	120	ug/kg	106		80-120		
HMX	100 U	100.	300	ug/kg	91		74-130		
Nitrobenzene	40 U	40.	120	ug/kg	103		80-120		
Nitroglycerin	800 U	800.	2,400	ug/kg	86		80-120		
2-Nitrotoluene	80 U	80.	120	ug/kg	101		78-128		

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
3-Nitrotoluene	100 U	100.	120	ug/kg	107		73-127		
4-Nitrotoluene	80	U 80.	120	ug/kg	100		80-120		
PETN	800 U	800.	2,400	ug/kg	101		80-120		
RDX	50	U 50.	120	ug/kg	101		75-131		
Tetryl	61	U 61.	120	ug/kg	97		70-168		
1,3,5-Trinitrobenzene	40	U 40.	120	ug/kg	103		77-137		
2,4,6-Trinitrotoluene	40	U 40.	120	ug/kg	107		80-120		
Batch number: 112900016A Sample number(s): 6435702									
4-Amino-2,6-Dinitrotoluene	0.30	U 0.30	0.60	ug/l	99	93	80-120	6	30
2-Amino-4,6-Dinitrotoluene	0.20	U 0.20	0.60	ug/l	94	88	80-120	7	30
2,6-Diamino-4-nitrotoluene	0.20	U 0.20	0.60	ug/l	80	83	50-122	4	30
2,4-Diamino-6-nitrotoluene	0.20	U 0.20	0.60	ug/l	80	83	50-122	4	30
1,3-Dinitrobenzene	0.20	U 0.20	0.60	ug/l	100	96	72-117	4	30
2,4-Dinitrotoluene	0.20	U 0.20	0.60	ug/l	93	89	80-120	4	30
2,6-Dinitrotoluene	0.20	U 0.20	0.60	ug/l	100	97	80-120	3	30
HMX	0.65	U 0.65	2.0	ug/l	87	82	65-125	6	30
Nitrobenzene	0.20	U 0.20	0.60	ug/l	92	88	75-121	4	30
Nitroglycerin	5.2	U 5.2	15	ug/l	92	88	80-120	5	30
2-Nitrotoluene	0.20	U 0.20	0.60	ug/l	93	88	74-120	6	30
3-Nitrotoluene	0.40	U 0.40	1.2	ug/l	98	94	69-107	4	30
4-Nitrotoluene	0.60	U 0.60	1.2	ug/l	93	88	80-120	6	30
PETN	6.0	U 6.0	18	ug/l	96	96	80-120	0	30
RDX	0.20	U 0.20	0.60	ug/l	88	82	70-125	7	30
Tetryl	0.40	U 0.40	0.60	ug/l	92	86	31-148	7	30
1,3,5-Trinitrobenzene	0.20	U 0.20	0.60	ug/l	88	82	53-129	7	30
2,4,6-Trinitrotoluene	0.20	U 0.20	0.60	ug/l	98	93	76-109	5	30
Batch number: 112860019A Sample number(s): 6435702									
20b Formaldehyde 8315A	10	U 10.	50	ug/l	106	108	69-130	2	30
Batch number: 112910002A Sample number(s): 6435690-6435692, 6435694-6435697									
20a Formaldehyde 8315A	600 U	600.	1,500	ug/kg	103		80-126		
Batch number: 112900011A Sample number(s): 6435702									
Aroclor 5432	0.10	U 0.10	0.50	ug/l					
Aroclor 5442	0.10	U 0.10	0.50	ug/l	76	74	35-84	3	30
Aroclor 5460	0.10	U 0.10	0.50	ug/l					
PCB-1016	0.10	U 0.10	0.50	ug/l	84	90	51-128	7	30
PCB-1221	0.10	U 0.10	0.50	ug/l					
PCB-1232	0.20	U 0.20	0.50	ug/l					
PCB-1242	0.10	U 0.10	0.50	ug/l					
PCB-1248	0.10	U 0.10	0.50	ug/l					
PCB-1254	0.10	U 0.10	0.50	ug/l					
PCB-1260	0.15	U 0.15	0.50	ug/l	94	102	56-135	8	30
PCB-1262	0.20	U 0.20	0.50	ug/l					
PCB-1268	0.16	U 0.16	0.50	ug/l					
Batch number: 112900017A Sample number(s): 6435690-6435692, 6435694-6435697									
Aroclor 5432	1.0	U 1.0	3.3	ug/kg					
Aroclor 5442	1.0	U 1.0	3.3	ug/kg	72	72	36-106	0	30
Aroclor 5460	1.0	U 1.0	3.3	ug/kg					
PCB-1016	0.33	U 0.33	1.7	ug/kg	88		72-120		
PCB-1221	0.33	U 0.33	1.7	ug/kg					
PCB-1232	0.33	U 0.33	1.7	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
PCB-1242	0.33 U	0.33	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.39 U	0.39	1.7	ug/kg	106		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 112870020A	Sample number(s): 6435702								
Ethanol	200 U	200.	1,000	ug/l	96		78-116		
Isopropanol	200 U	200.	1,000	ug/l	96		75-125		
Methanol	200 U	200.	1,000	ug/l	96		76-122		
Batch number: 112900025A	Sample number(s): 6435690-6435692, 6435694-6435697								
Ethanol	100 U	100.	500	ug/kg	89		71-129		
Isopropanol	100 U	100.	500	ug/kg	87		75-125		
Methanol	100 U	100.	500	ug/kg	88		68-129		
Batch number: 112910030A	Sample number(s): 6435702								
Diethylene glycol	20 U	20.	200	mg/l	120		67-126		
Ethylene glycol	20 U	20.	200	mg/l	137*		78-136		
Propylene glycol	20 U	20.	200	mg/l	140*		65-132		
Batch number: 112930029A	Sample number(s): 6435690-6435692, 6435696-6435697								
Diethylene glycol	5.0 U	5.0	10	mg/kg	100		75-125		
Ethylene glycol	5.0 U	5.0	10	mg/kg	102		53-149		
Propylene glycol	5.0 U	5.0	10	mg/kg	98		67-131		
Batch number: 112870007A	Sample number(s): 6435690-6435692, 6435694-6435697								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	102		64-111		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	107		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	100		69-109		
Batch number: 112880013A	Sample number(s): 6435702								
m-Terphenyl	0.080 U	0.080	0.25	mg/l	98	102	61-108	4	20
o-Terphenyl	0.080 U	0.080	0.25	mg/l	102	104	75-125	2	20
p-Terphenyl	0.080 U	0.080	0.25	mg/l	98	102	63-110	4	20
Batch number: 112900022A	Sample number(s): 6435702								
EFH (C12-C14)	0.10 U	0.10	0.60	mg/l	88	86	63-121	2	30
EFH (C15-C20)	0.10 U	0.10	0.60	mg/l	93	95	72-124	1	30
EFH (C21-C30)	0.10 U	0.10	0.60	mg/l	92	73	64-123	23	30
EFH (C30 - C40)	0.10 U	0.10	0.60	mg/l	73	80	73-124	9	30
EFH (C8-C11)	0.10 U	0.10	0.60	mg/l	76	74	43-107	3	30
Batch number: 112910012A	Sample number(s): 6435690-6435692, 6435694-6435697								
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	90		70-123		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	93		75-128		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	76		64-134		
EFH (C30 - C40)	0.40 U	0.40	1.2	mg/kg	85		65-128		
EFH (C8-C11)	0.40 U	0.40	1.2	mg/kg	82		49-107		
Batch number: 112871026001A	Sample number(s): 6435690-6435693, 6435696-6435697								

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Antimony	0.0740 U	0.0740	0.200	mg/kg	77		40-227		
Arsenic	0.0815 J	0.0800	0.400	mg/kg	103		83-111		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	102		84-112		
Cadmium	0.0440 U	0.0440	0.100	mg/kg	103		83-111		
Chromium	0.120 U	0.120	0.400	mg/kg	110		77-123		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	103		85-114		
Copper	0.0800 U	0.0800	0.400	mg/kg	102		81-110		
Lead	0.0143 J	0.0102	0.200	mg/kg	101		84-112		
Nickel	0.100 U	0.100	0.400	mg/kg	101		81-110		
Silver	0.0142 U	0.0142	0.100	mg/kg	103		83-112		
Thallium	0.0300 U	0.0300	0.100	mg/kg	103		82-112		
Vanadium	0.0333 J	0.0220	0.100	mg/kg	101		76-110		
Zinc	0.560 U	0.560	3.00	mg/kg	106		82-110		
Batch number: 112871026001B	Sample number(s): 6435690-6435693, 6435696-6435697								
Selenium	0.0580 U	0.0580	0.400	mg/kg	96		79-110		
Batch number: 112871026001C	Sample number(s): 6435690-6435693, 6435696-6435697								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	100		80-110		
Batch number: 112871026001D	Sample number(s): 6435690-6435693, 6435696-6435697								
Barium	0.106 U	0.106	0.400	mg/kg	101		83-110		
Batch number: 112875708002	Sample number(s): 6435690-6435693, 6435696-6435697								
Aluminum	6.05 U	6.05	20.0	mg/kg	84		40-127		
Boron	0.360 U	0.360	5.00	mg/kg	99		83-110		
Calcium	7.22 J	2.50	20.0	mg/kg	93		81-110		
Iron	4.39 J	2.61	20.0	mg/kg	90		47-129		
Lithium	0.62 U	0.62	2.0	mg/kg	97		80-120		
Magnesium	0.877 J	0.440	10.0	mg/kg	88		63-116		
Manganese	0.0440 J	0.0360	0.500	mg/kg	97		85-116		
Phosphorus	1.13 J	0.350	10.0	mg/kg	103		80-120		
Potassium	11.3 U	11.3	50.0	mg/kg	96		71-110		
Sodium	5.95 U	5.95	100	mg/kg	97		76-110		
Strontium	0.0380 J	0.0250	0.500	mg/kg	99		84-110		
Tin	1.43 J	0.320	10.0	mg/kg	101		86-120		
Zirconium	0.460 U	0.460	5.00	mg/kg	100		80-120		
Batch number: 112875711001	Sample number(s): 6435690-6435693, 6435696-6435697								
Mercury	0.0069 U	0.0069	0.0978	mg/kg	97		83-119		
Batch number: 112921848006	Sample number(s): 6435702								
Aluminum	0.0801 U	0.0801	0.200	mg/l	100	99	90-112	0	20
Boron	0.0022 U	0.0022	0.0500	mg/l	93	89	89-110	5	20
Calcium	0.0705 U	0.0705	0.200	mg/l	97	97	90-110	0	20
Iron	0.0141 U	0.0141	0.200	mg/l	101	101	90-112	0	20
Lithium	0.0076 U	0.0076	0.0200	mg/l	98	97	90-110	1	20
Magnesium	0.0067 U	0.0067	0.100	mg/l	99	100	90-110	1	20
Manganese	0.00046 J	0.00044	0.0050	mg/l	99	95	90-110	4	20
Phosphorus	0.0047 U	0.0047	0.100	mg/l	99	98	90-110	1	20
Potassium	0.0874 U	0.0874	0.500	mg/l	101	97	85-115	3	20
Sodium	0.0647 U	0.0647	1.00	mg/l	100	97	87-114	3	20
Strontium	0.00022 U	0.00022	0.0050	mg/l	99	94	90-110	5	20
Tin	0.0043 U	0.0043	0.0200	mg/l	95	94	90-110	1	20
Titanium	0.00046 U	0.00046	0.0100	mg/l	101	95	90-113	6	20
Zirconium	0.0042 U	0.0042	0.0500	mg/l	102	99	90-110	3	20
Batch number: 112925713004	Sample number(s): 6435702								

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Mercury	0.000026 U	0.00002 6	0.00020	mg/l	97	101	80-120	4	20
Batch number: 112926050003A	Sample number(s): 6435702								
Antimony	0.00042 U	0.00042	0.0010	mg/l	106	97	87-110	10	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	98	101	86-111	2	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	106	106	90-113	0	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	95	104	90-114	8	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	102	107	90-118	5	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	102	101	87-113	1	20
Copper	0.00038 U	0.00038	0.0020	mg/l	105	103	90-113	1	20
Lead	0.000080 U	0.00008 0	0.0010	mg/l	105	104	90-115	0	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	103	103	90-113	0	20
Silver	0.000098 U	0.00009 8	0.00050	mg/l	103	101	90-115	3	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	106	97	89-116	9	20
Vanadium	0.00018 U	0.00018	0.00050	mg/l	104	106	89-116	2	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	100	109	90-116	8	20
Batch number: 112926050003B	Sample number(s): 6435702								
Selenium	0.00027 U	0.00027	0.0020	mg/l	108	106	85-114	2	20
Batch number: 112926050003C	Sample number(s): 6435702								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	104	98	89-115	6	20
Batch number: 112926050003D	Sample number(s): 6435702								
Barium	0.00069 U	0.00069	0.0020	mg/l	99	98	88-113	1	20
Batch number: 112975708004	Sample number(s): 6435690-6435693, 6435696-6435697								
Titanium	0.0710 U	0.0710	1.00	mg/kg	88		80-120		
Batch number: 11286196901C	Sample number(s): 6435702								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	96	94	90-110	2	20
11b Anions by 300.0 - Nitrate	0.050 U	0.050	0.10	mg/l	97	97	90-110	0	20
Batch number: 11286281101A	Sample number(s): 6435702								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	91	92	85-115	1	20
Batch number: 11286281401A	Sample number(s): 6435702								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	99	101	90-110	2	20
Batch number: 11290117101B	Sample number(s): 6435702								
16b Cyanide by 9012B	0.0050 U	0.0050	0.010	mg/l	103	102	90-110	1	20
Batch number: 11291243201A	Sample number(s): 6435690-6435691, 6435693, 6435696-6435697								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	81		80-120		
Batch number: 11292621202B	Sample number(s): 6435690-6435691, 6435693, 6435696-6435697								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	111		85-115		
Batch number: 11293102201A	Sample number(s): 6435690-6435691, 6435693, 6435696-6435697								
16a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	85		80-120		
Batch number: 11297495201B	Sample number(s): 6435690-6435691, 6435693								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	102		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	103		90-110		

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11299621201A	Sample number(s): 6435696-6435697								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	104		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	106		90-110		
Batch number: 11286020001A	Sample number(s): 6435702								
17b pH by 9040B					100	100	90-110	0	3
Batch number: 11299039402A	Sample number(s): 6435690,6435693,6435696-6435697								
17a pH by 9045C					100		95-105		
Batch number: 11291162401B	Sample number(s): 6435700								
Moisture Content by 160.3					100		80-120		
Batch number: 11298162401A	Sample number(s): 6435690-6435694,6435696-6435697								
28a Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11287SLB026	Sample number(s): 6435690-6435692,6435696-6435697 UNSPK: 6435690								
Acenaphthene	82	90	63-105	10	30				
Acenaphthylene	79	86	67-114	8	30				
Anthracene	89	94	73-115	6	30				
Benzo(a)anthracene	86	94	59-128	8	30				
Benzo(a)pyrene	87	92	58-142	6	30				
Benzo(b)fluoranthene	100	109	54-163	9	30				
Benzo(g,h,i)perylene	46	52	33-141	11	30				
Benzo(k)fluoranthene	90	96	57-153	6	30				
Butylbenzylphthalate	71	79	57-173	10	30				
Di-n-butylphthalate	84	90	65-148	7	30				
Chrysene	87	95	67-123	9	30				
Dibenz(a,h)anthracene	58	63	22-133	9	30				
Diethylphthalate	81	86	70-136	6	30				
Dimethylphthalate	88	100	74-118	13	30				
Bis(2-Ethylhexyl)phthalate	76	83	39-167	9	30				
Fluoranthene	116	121	51-149	4	30				
Fluorene	82	90	66-122	9	30				
Indeno(1,2,3-cd)pyrene	57	63	21-143	10	30				
1-Methylnaphthalene	72	83	72-123	13	30				
2-Methylnaphthalene	72	83	64-103	14	30				
Naphthalene	80	89	61-102	11	30				
N-Nitrosodimethylamine	81	91	48-113	11	30				
Di-n-octylphthalate	93	96	40-192	4	30				
Phenanthrene	84	91	62-122	8	30				
Pyrene	67	75	51-131	11	30				
Batch number: 11290SLD026	Sample number(s): 6435690-6435692,6435696-6435697,6435700 UNSPK: 6435690								
N-Nitrosodimethylamine	104	104	70-130	0	30				

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11290SLE026 Sample number(s): 6435690-6435692, 6435696-6435697 UNSPK: 6435690									
Acenaphthene	98	97	75-115	1	30				
Acenaphthylene	106	104	81-110	1	30				
Aniline	72	71	18-116	2	30				
Anthracene	101	97	75-115	4	30				
Benizidine	38	37	35-141	4	30				
Benzo(a)anthracene	100	97	65-122	3	30				
Benzo(a)pyrene	103	99	57-126	4	30				
Benzo(b)fluoranthene	108	100	59-125	8	30				
Benzo(g,h,i)perylene	110	104	59-127	5	30				
Benzo(k)fluoranthene	94	93	56-132	2	30				
Benzoic acid	0*	0*	10-173	0	30				
Benzyl alcohol	106	103	67-115	2	30				
4-Bromophenyl-phenylether	106	102	67-129	4	30				
Butylbenzylphthalate	99	95	73-134	4	30				
Di-n-butylphthalate	97	93	67-123	4	30				
Carbazole	96	93	64-120	3	30				
4-Chloro-3-methylphenol	110	109	62-122	1	30				
4-Chloroaniline	62	68	13-107	9	30				
bis(2-Chloroethoxy)methane	103	102	75-104	1	30				
bis(2-Chloroethyl)ether	100	96	60-116	4	30				
bis(2-Chloroisopropyl)ether	101	97	55-142	4	30				
2-Chloronaphthalene	81	79	50-141	3	30				
2-Chlorophenol	101	101	73-121	1	30				
4-Chlorophenyl-phenylether	103	102	80-109	2	30				
Chrysene	95	92	62-128	4	30				
Dibenz(a,h)anthracene	114	108	65-125	5	30				
Dibenzofuran	98	97	71-112	2	30				
1,2-Dichlorobenzene	86	85	66-108	1	30				
1,3-Dichlorobenzene	84	82	63-109	3	30				
1,4-Dichlorobenzene	85	83	58-108	3	30				
3,3'-Dichlorobenzidine	55	59	28-109	7	30				
2,4-Dichlorophenol	101	104	66-123	3	30				
Diethylphthalate	96	94	66-118	2	30				
2,4-Dimethylphenol	106	105	68-118	2	30				
3,5-Dimethylphenol	118	118	71-127	0	30				
Dimethylphthalate	98	95	64-118	2	30				
4,6-Dinitro-2-methylphenol	10*	12	11-126	14	30				
2,4-Dinitrophenol	0*	0*	20-143	0	30				
2,4-Dinitrotoluene	103	101	56-129	2	30				
2,6-Dinitrotoluene	103	102	69-123	1	30				
1,2-Diphenylhydrazine	109	105	71-129	3	30				
bis(2-Ethylhexyl)phthalate	102	100	63-122	2	30				
Fluoranthene	99	97	73-112	2	30				
Fluorene	102	100	63-121	1	30				
Hexachlorobenzene	108	104	77-114	4	30				
Hexachlorobutadiene	96	95	62-120	1	30				
Hexachlorocyclopentadiene	47	48	10-153	3	30				
Hexachloroethane	84	81	57-109	3	30				
Indeno(1,2,3-cd)pyrene	112	107	61-126	4	30				
Isophorone	108*	107*	73-102	1	30				
1-Methylnaphthalene	96	94	64-122	2	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Sample Matrix Quality Control

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

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Methylnaphthalene	98	97	76-114	1	30				
2-Methylphenol	108	106	75-111	2	30				
4-Methylphenol	107	104	59-123	2	30				
Naphthalene	96	96	72-116	0	30				
2-Nitroaniline	106	108	67-125	2	30				
3-Nitroaniline	97	96	59-122	1	30				
4-Nitroaniline	79	76	41-109	4	30				
Nitrobenzene	109	108	57-125	1	30				
2-Nitrophenol	89	104	56-127	16	30				
4-Nitrophenol	66	78	37-129	17	30				
N-Nitroso-di-n-propylamine	102	100	60-116	3	30				
N-Nitrosodimethylamine	101	101	47-116	0	30				
N-Nitrosodiphenylamine	101	96	71-122	5	30				
Di-n-octylphthalate	105	100	56-126	4	30				
Pentachlorophenol	24*	41	28-127	52*	30				
Phenanthrene	97	93	65-125	4	30				
Phenol	105	102	58-126	3	30				
Pyrene	99	95	74-126	3	30				
1,2,4-Trichlorobenzene	96	97	72-115	0	30				
2,4,5-Trichlorophenol	92	102	58-129	9	30				
2,4,6-Trichlorophenol	85	100	56-134	16	30				
Batch number: 11290B16A	Sample number(s): 6435690-6435692 UNSPK: 6435690								
9a TPH by EPA 8015B Gas C5-C12	73	65	39-118	7	30				
Batch number: 11290B16B	Sample number(s): 6435696-6435697 UNSPK: 6435690								
9a TPH by EPA 8015B Gas C5-C12	73	65	39-118	7	30				
Batch number: 112880014A	Sample number(s): 6435690-6435692, 6435694-6435697 UNSPK: 6435690								
4-Amino-2,6-Dinitrotoluene	109	110	80-127	1	50				
2-Amino-4,6-Dinitrotoluene	109	107	80-137	1	50				
1,3-Dinitrobenzene	112	111	38-166	1	50				
2,4-Dinitrotoluene	102	102	80-131	0	50				
2,6-Dinitrotoluene	107	105	80-127	1	50				
HMX	94	94	63-128	0	50				
Nitrobenzene	107	105	80-125	2	50				
Nitroglycerin	100	99	80-120	1	50				
2-Nitrotoluene	104	102	80-122	2	50				
3-Nitrotoluene	110	109	72-119	2	50				
4-Nitrotoluene	103	102	80-125	1	50				
PETN	109	108	80-121	1	50				
RDX	100	99	75-129	1	50				
Tetryl	93	92	55-174	1	50				
1,3,5-Trinitrobenzene	105	103	82-126	2	50				
2,4,6-Trinitrotoluene	109	108	82-130	1	50				
Batch number: 112910002A	Sample number(s): 6435690-6435692, 6435694-6435697 UNSPK: 6435690								
20a Formaldehyde 8315A	96	99	80-120	3	50				
Batch number: 112900017A	Sample number(s): 6435690-6435692, 6435694-6435697 UNSPK: 6435690								
PCB-1016	94	79	29-146	17	50				
PCB-1260	112	83	39-149	28	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 112870020A	Sample number(s): 6435702 UNSPK: P434238								
Ethanol	94	98	62-145	4	20				
Isopropanol	100	100	73-131	0	20				
Methanol	80	96	52-159	16	20				
Batch number: 112900025A	Sample number(s): 6435690-6435692, 6435694-6435697 UNSPK: 6435690								
Ethanol	78	84	48-130	7	20				
Isopropanol	76	82	12-149	7	20				
Methanol	80	85	43-138	6	20				
Batch number: 112910030A	Sample number(s): 6435702 UNSPK: 6435702								
Diethylene glycol	120	125	83-130	4	20				
Ethylene glycol	137*	137*	89-125	0	20				
Propylene glycol	135*	135*	91-128	0	20				
Batch number: 112930029A	Sample number(s): 6435690-6435692, 6435696-6435697 UNSPK: 6435690								
Diethylene glycol	5*	8*	59-109	42*	20				
Ethylene glycol	47*	45*	63-107	6	20				
Propylene glycol	65	62*	63-107	5	20				
Batch number: 112870007A	Sample number(s): 6435690-6435692, 6435694-6435697 UNSPK: 6435690								
m-Terphenyl	93	95	75-125	1	20				
o-Terphenyl	107	107	75-125	0	20				
p-Terphenyl	85	90	75-125	6	20				
Batch number: 112910012A	Sample number(s): 6435690-6435692, 6435694-6435697 UNSPK: 6435690								
EFH (C12-C14)	76	894*	49-123	169*	20				
EFH (C15-C20)	69	1343*	49-123	172*	20				
EFH (C21-C30)	132*	329*	49-123	63*	20				
EFH (C30 - C40)	165*	92	49-123	22*	20				
EFH (C8-C11)	60	129*	49-123	73*	20				
Batch number: 112871026001A	Sample number(s): 6435690-6435693, 6435696-6435697 UNSPK: 6435690 BKG: 6435690								
Antimony	58*	42*	75-125	32*	20	0.0733 U	0.0718 U	0 (1)	20
Arsenic	64*	39*	75-125	7	20	6.27	5.09	21*	20
Beryllium	108	91	75-125	9	20	0.674	0.567	17	20
Cadmium	128*	114	75-125	11	20	0.124	0.129	4 (1)	20
Chromium	108	71*	75-125	13	20	17.4	16.8	3	20
Cobalt	128*	114	75-125	10	20	6.79	5.90	14	20
Copper	121	98	75-125	11	20	9.00	8.80	2	20
Lead	134*	29*	75-125	29*	20	8.07	6.36	24*	20
Nickel	118	80	75-125	17	20	12.0	9.74	21*	20
Silver	131*	121	75-125	8	20	0.0386 J	0.0181 J	73* (1)	20
Thallium	120	101	75-125	10	20	0.305	0.233	27* (1)	20
Vanadium	85	34*	75-125	12	20	34.5	27.6	22*	20
Zinc	5 (2)	-20 (2)	75-125	4	20	66.7	60.4	10	20
Batch number: 112871026001B	Sample number(s): 6435690-6435693, 6435696-6435697 UNSPK: 6435690 BKG: 6435690								
Selenium	120	103	75-125	15	20	0.163 J	0.120 J	30* (1)	20
Batch number: 112871026001C	Sample number(s): 6435690-6435693, 6435696-6435697 UNSPK: 6435690 BKG: 6435690								
Molybdenum	133*	117	75-125	13	20	0.284	0.304	7 (1)	20

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup Max	RPD
Batch number: 112871026001D	Sample number(s): 6435690-6435693, 6435696-6435697 UNSPK: 6435690 BKG: 6435690									
Barium	48 (2)	-93 (2)	75-125	16	20	83.3	66.7	22*		20
Batch number: 112875708002	Sample number(s): 6435690-6435693, 6435696-6435697 UNSPK: 6435690 BKG: 6435690									
Aluminum	1904 (2)	866 (2)	75-125	16	20	9,610	10,400	8		20
Boron	93	92	84-115	0	20	3.43 J	3.61 J	5 (1)		20
Calcium	-110 (2)	57 (2)	75-125	13	20	5,040	4,800	5		20
Iron	2018 (2)	859 (2)	75-125	6	20	17,000	18,600	9		20
Lithium	101	98	82-114	1	20	24.1	26.2	8		20
Magnesium	259 (2)	223 (2)	75-125	2	20	3,340	3,560	6		20
Manganese	129 (2)	95 (2)	75-125	5	20	233	254	9		20
Phosphorus	84	258*	75-125	39*	20	283	280	1		20
Potassium	125	120	75-125	1	20	1,930	2,060	7		20
Sodium	98	94	75-125	2	20	87.3 J	89.7 J	3 (1)		20
Strontium	95	94	75-115	0	20	19.1	19.4	2		20
Tin	91	91	80-110	2	20	2.66 J	2.71 J	2 (1)		20
Zirconium	96	96	81-110	1	20	2.80 J	3.99 J	35* (1)		20
Batch number: 112875711001	Sample number(s): 6435690-6435693, 6435696-6435697 UNSPK: 6435690 BKG: 6435690									
Mercury	102	100	65-135	2	20	0.0069 U	0.0067 U	0 (1)		20
Batch number: 112975708004	Sample number(s): 6435690-6435693, 6435696-6435697 UNSPK: 6435690 BKG: 6435690									
Titanium	258 (2)	255 (2)	75-125	0	20	1,060	1,030	3		20
Batch number: 11286281401A	Sample number(s): 6435702 UNSPK: P435633 BKG: P435633									
3b Cr VI by EPA 7199	91		59-135			5.0 U	5.0 U	0 (1)		20
Batch number: 11291243201A	Sample number(s): 6435690-6435691, 6435693, 6435696-6435697 UNSPK: 6435690 BKG: 6435690									
3a Cr VI by EPA 7199	91		75-125			0.20 U	0.20 U	0 (1)		20
Batch number: 11292621202B	Sample number(s): 6435690-6435691, 6435693, 6435696-6435697 UNSPK: 6435690 BKG: 6435690									
7a Perchlorate EPA 314.0	112		80-120			9.0 U	9.0 U	0 (1)		15
Batch number: 11293102201A	Sample number(s): 6435690-6435691, 6435693, 6435696-6435697 UNSPK: 6435690 BKG: 6435690									
16a Cyanide by 9012B	88		75-125			0.18 U	0.17 U	0 (1)		20
Batch number: 11297495201B	Sample number(s): 6435690-6435691, 6435693 UNSPK: 6435690 BKG: 6435690									
11a Anions by 300.0 - Fluoride	76*		80-120			2.1	1.9	11 (1)		20
11a Anions by 300.0 - Nitrate	95		80-120			0.98 J	0.89 J	9 (1)		20
Batch number: 11299621201A	Sample number(s): 6435696-6435697 UNSPK: 6435696 BKG: 6435696									
11a Anions by 300.0 - Fluoride	38*		80-120			1.5	1.5	2 (1)		20
11a Anions by 300.0 - Nitrate	104		80-120			1.8	1.9	7 (1)		20
Batch number: 11299039402A	Sample number(s): 6435690, 6435693, 6435696-6435697 BKG: 6435690									
17a pH by 9045C						8.55	8.53	0		3

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11291162401B	Sample number(s): 6435700				BKG: P431141				
Moisture Content by 160.3						4.4	4.3	2	20
Batch number: 11298162401A	Sample number(s): 6435690-6435694, 6435696-6435697				BKG: 6435690				
28a Moisture Content by 160.3						2.2	2.3	4 (1)	20
Moisture Content by 160.3						2.2	2.3	4 (1)	20
Moisture Content by 160.3						2.2	2.3	4 (1)	20

Surrogate Quality Control

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

Analysis Name: 21b. NDMA in Water
Batch number: 11286WAH026
N-Nitrosodimethylamine-
d6

6435698	347*
6435699	190*
6435702	305*
Blank	153*
LCS	148
LCSD	160*

Limits: 50-150

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11287SLB026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6435690	95	83	66
6435691	103	89	67
6435692	106	88	66
6435696	93	82	84
6435697	96	84	85
Blank	97	89	87
LCS	99	87	86
MS	103	89	67
MSD	106	88	66

Limits: 40-130 45-130 45-135

Analysis Name: 21a NDMA by 1625C
Batch number: 11290SLD026
N-Nitrosodimethylamine-
d6

6435690	100
6435691	86

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Surrogate Quality Control

6435692 76
6435696 69
6435697 75
6435700 89
Blank 116
LCS 123
MS 86
MSD 76

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 11290SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6435690	99	98	95	97	89	89
6435691	104	102	79	101	88	89
6435692	103	103	92	101	88	87
6435696	102	101	102	97	86	88
6435697	95	90	87	86	78	86
Blank	94	95	94	96	87	87
LCS	110	109	106	100	88	83
MS	104	102	79	101	88	89
MSD	103	103	92	101	88	87

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 5b Semivolatiles by EPA 8270C
Batch number: 11290WAB026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6435702	59	36	113	103	93	93
Blank	55	33	111	100	91	91
LCS	56	34	106	97	86	85
LCSD	65	40	113	106	93	88

Limits: 20-130 20-120 30-130 40-130 45-130 45-135

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 11290WAJ026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6435702	103	92	86
Blank	95	87	84
LCS	109	97	86
LCSD	110	94	85

Limits: 40-130 45-130 45-135

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 11287A20A
Trifluorotoluene-F

6435701 88
6435702 91
Blank 87
LCS 115

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Surrogate Quality Control

LCSD 114

Limits: 63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 11290B16A
Trifluorotoluene-F

6435690	94
6435691	96
6435692	92
Blank	84
LCS	92
MS	96
MSD	92

Limits: 61-122

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 11290B16B
Trifluorotoluene-F

6435696	80
6435697	93
Blank	94
LCS	92
MS	96
MSD	92

Limits: 61-122

Analysis Name: 20b Formaldehyde 8315A
Batch number: 112860019A
Butyraldehyde

6435702	96
Blank	87
LCS	103
LCSD	83

Limits: 45-145

Analysis Name: 15a Energetics by 8330A
Batch number: 112880014A
2-Nitro-m-xylene

6435690	125
6435691	116
6435692	113
6435694	117
6435695	122
6435696	127
6435697	124
Blank	118
LCS	112
LCSD	129
MS	116

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Surrogate Quality Control

MSD 113

Limits: 80-146

Analysis Name: 8b PCBs/PCTs by 8082

Batch number: 112900011A

Tetrachloro-m-xylene Decachlorobiphenyl

6435702	95	107
Blank	94	78
LCS	90	90
LCSD	91	112

Limits: 30-150 45-120

Analysis Name: 15b Energetics by 8330A

Batch number: 112900016A

2-Nitro-m-xylene

6435702	97
Blank	98
LCS	97
LCSD	90

Limits: 50-134

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112900017A

Tetrachloro-m-xylene Decachlorobiphenyl

6435690	100	101
6435691	106	116
6435692	87	84
6435694	98	109
6435695	86	98
6435696	97	107
6435697	96	90
Blank	94	105
LCS	98	114
LCSD	102	115
MS	106	116
MSD	87	84

Limits: 53-139 45-120

Analysis Name: 20a Formaldehyde 8315A

Batch number: 112910002A

Butyraldehyde

6435690	77
6435691	76
6435692	76
6435694	81
6435695	90
6435696	83
6435697	72
Blank	92

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Surrogate Quality Control

LCS 85
MS 76
MSD 76

Limits: 64-126

Analysis Name: 22a Terphenyls by 8015B
Batch number: 112870007A
n-Triacontane-d62

6435690 77
6435691 73
6435692 72
6435694 79
6435695 77
6435696 95
6435697 79
Blank 76
LCS 76
MS 73
MSD 72

Limits: 19-152

Analysis Name: 18b Alcohols by 8015B
Batch number: 112870020A
Acetone

6435702 90
Blank 89
LCS 89
MS 99
MSD 102

Limits: 54-147

Analysis Name: 22b Terphenyls by 8015B
Batch number: 112880013A
n-Triacontane-d62

6435702 73
Blank 73
LCS 67
LCSD 69

Limits: 17-138

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel
Batch number: 112900022A
Chlorobenzene Orthoterphenyl

6435702	83	83
Blank	79	79
LCS	86	91
LCSD	84	92

Limits: 28-152 52-131

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Surrogate Quality Control

Analysis Name: 18a Alcohols by 8015B
Batch number: 112900025A
Acetone

6435690	86
6435691	70
6435692	72
6435694	70
6435695	82
6435696	53
6435697	81
Blank	85
LCS	83
MS	70
MSD	72

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 112910012A
Chlorobenzene Orthoterphenyl

6435690	88	89
6435691	76	82
6435692	94	78
6435694	64	67
6435695	88	89
6435696	85	83
6435697	79	85
Blank	84	86
LCS	87	88
MS	76	82
MSD	94	78

Limits: 37-125 47-145

Analysis Name: 19b Glycols by 8015B
Batch number: 112910030A
Tetramethylene glycol

6435702	117
Blank	126
LCS	134
MS	124
MSD	129

Limits: 29-157

Analysis Name: 19a Glycols by 8015B
Batch number: 112930029A
Tetramethylene glycol

6435690	89
6435691	92
6435692	90
6435696	89

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Surrogate Quality Control

6435697	91
Blank	98
LCS	98
MS	92
MSD	90

Limits: 29-137

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

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

sample # 6435690-702

CDM						SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS						SECONDARY FOR ALL LOCATIONS						Other Instructions and Notes	
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.																									
Samplers Signatures:																									
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020B&7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTE EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6080 (10%)	TPH-GRO EPA 8015B \$	*TPH-EPI EPA 8015B Mod.	*Nitrates EPA 300.0	*Formaldehyde EPA 8315A	*In-NDMA EPA 1625C	*Energetics EPA 8350A	*Cyanide EPA 9012B	*Triphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohols EPA 8015B	*Downal EPA 8270
SL-011-SA3-SB-4.5MS	10.12.11	1019	SOIL	NONE	6-Encores									X		X	X	X	X	X	X	X	X		MS/MSD
SL-011-SA3-SB-4.0-5.0MS	10.12.11	1025	SOIL	NONE	12-16 oz Jars	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X		
SL-096-SA7-SB-2.5	10.12.11	1145	SOIL	NONE	2-Encores									X											
SL-096-SA7-SB-2.0-3.0	10.12.11	1140	SOIL	NONE	1-SS Sleeve			X	X																
SL-096-SA7-SB-2.0-3.0	10.12.11	1140	SOIL	NONE	2-16 oz Jars	X	X			X	X	X	X			X	X	X	X	X	X	X	X		
DUP01-SA3-QC-101211	10.12.11	1035	SOIL	NONE	2-Encores									X											
DUP01-SA3-QC-101211	10.12.11	1035	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X		
EB-SA3-SB-101211	10.12.11	1423	WATER	NONE	1-1 L Amber													X							HGL ASTM II WATER
TB-101211	10.12.11	0800	WATER	NONE	1-1 L Amber													X							
TB-101211	10.12.11	0800	SOIL	NONE	1-4 oz Jar													X							
TB-101211	10.12.11	0800	WATER	NONE	2-40 mL Vials									X											
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)										Laboratory:											
		10/12/2011 / 1630												Lancaster Laboratories, Inc.											
Received by: (Signature)		Date/Time		Airbill No.(s)																					
		10-13-11 900		8767 9857 5121,5512,5110																					

sample # 6435690-702

CDM						SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS						SECONDARY FOR ALL LOCATIONS																
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 800.3 will be performed on soil in 15 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.																																		
Samplers Signatures:																																		
SAMPLE NUMBER	DATE	TIME	MATRIX	PRESERVATIVE	Type & No. of Containers	*Metals EPA 8010/8200B/7471A	**Fluoride EPA 300.0	**SVOCs EPA 8270C & PAHs 8270 SIM	**PCBs/PCTs EPA 8082	**Dioxin/Furan EPA 1613B	**Perchlorate EPA 314.0	**Hex Chrome EPA 7199	**pH EPA 8045C/8040B	Perchlorate Confirmation by EPA 8850 (10%)	TPH-GRO EPA 8015B \$	**TPH-EPH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**p-NOMA EPA 1025C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Acetohols EPA 8015B	**Downal EPA 8270									
EB-SA3-SB-101211	10.12.11	1400	WATER	NONE	10-1 liter ambers			X	X	X						X			X	X		X		X	EB collected for DPT crew									
EB-SA3-SB-101211	10.12.11	1400	WATER	NONE	1-500 mL poly		X				X	X	X																					
EB-SA3-SB-101211	10.12.11	1400	WATER	HNO ₃	1-500 mL poly	X																												
EB-SA3-SB-101211	10.12.11	1400	WATER	NaOH	1-500 mL poly															X														
EB-SA3-SB-101211	10.12.11	1400	WATER	NONE	1-250 mL glass													X																
EB-SA3-SB-101211	10.12.11	1400	WATER	HCL	11-40 mL vials									X									X											
EB-SA3-SB-101211	10.12.11	1400	WATER	NONE	4-40 mL vials											X						X												
Relinquished by: (Signature)						Date/Time						Received for Laboratory by: (Signature)						Laboratory:																
						10/12/2011 / 1630												Lancaster Laboratories, Inc.																
Received by: (Signature)						Date/Time						Airbill No.(#)																						
						10-13-11 9am						8767 9857 5121,5512,5110																						

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Thursday, October 13, 2011 2:05 PM
To: Nicole Maljovec
Subject: RE: Bottles and such

I think I put an incorrect label on all of our EBs for yesterday. The COC is correct, they should be called EB-SA3-SB-101211. I think I labeled them with SA7 instead.

Pls let me know if there's a problem with these ! Thanks

Pamela Hartman
CDM
523 W 6th St #400
Los Angeles, CA 90014
Cell 714-900-0916
Direct 818-466-8007

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]
Sent: Thursday, October 13, 2011 10:23 AM
To: Hartman, Pamela
Subject: RE: Bottles and such

I was thinking about that. I'll put in an order for 10 Water NDMA TBs and 10 Soil NDMA TBs right now. It takes about 4 days to get the bottles to you, so you should have them by 10/19.

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]
Sent: Thursday, October 13, 2011 1:18 PM
To: Nicole Maljovec
Subject: Bottles and such

Hi Nicole

Hope your week has been going well. I would like to put in an order for next week. Could we please have the following:

200 16 oz Jars
Extra round foam discs for packing between jars and bottles

Will we be receiving double soil and water trip blanks next week to cover our onsite sampling and the remote sampling for the week of Oct. 24th?

Thanks!

Pam

Pamela Hartman
CDM
523 W 6th St #400
Los Angeles, CA 90014
Cell 714-900-0916
Direct 818-466-8007

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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



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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

October 30, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/13/2011
Group Number: 1271038
SDG: DX149
PO Number: 1203-004-009-AL
Release Number: TRACKING #12571
State of Sample Origin: CA

Client Sample Description

SL-011-SA3-SB-4.0-5.0 Soil
SL-011-SA3-SB-4.0-5.0MS Soil
SL-011-SA3-SB-4.0-5.0MSD Soil
SL-096-SA7-SB-2.0-3.0 Soil
DUP01-SA3-QC-101211 Soil
EB-SA3-SB-101211 Water

Lancaster Labs (LLI) #

6435711
6435712
6435713
6435714
6435715
6435716

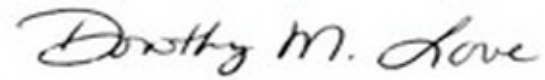
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO
ELECTRONIC COPY TO
CDM Federal Services Program
Data Package Group

Attn: Todd Burgess

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

Respectfully Submitted,



Dorothy M. Love
Group Leader



Analysis Report

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

Page 1 of 4

Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435711
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	2.2	0.50	0.50	1

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

Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435711
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0475 U	0.0475	1.01	1
11031	12378-PeCDD	40321-76-4	0.0407 U	0.0407	5.07	1
11031	123478-HxCDD	39227-28-6	0.0260 U	0.0260	5.07	1
11031	123678-HxCDD	57653-85-7	0.106 JQ	0.0268	5.07	1
11031	123789-HxCDD	19408-74-3	0.143 JB	0.0273	5.07	1
11031	1234678-HpCDD	35822-46-9	0.940 JB	0.0453	5.07	1
11031	OCDD	3268-87-9	5.84 JB	0.0394	10.1	1
11031	2378-TCDF	51207-31-9	0.0390 U	0.0390	1.01	1
11031	12378-PeCDF	57117-41-6	0.0648 JBQ	0.0269	5.07	1
11031	23478-PeCDF	57117-31-4	0.288 JB	0.0263	5.07	1
11031	123478-HxCDF	70648-26-9	0.247 JBQ	0.0262	5.07	1
11031	123678-HxCDF	57117-44-9	0.0517 JB	0.0245	5.07	1
11031	123789-HxCDF	72918-21-9	0.0282 U	0.0282	5.07	1
11031	234678-HxCDF	60851-34-5	0.0969 JBQ	0.0222	5.07	1
11031	1234678-HpCDF	67562-39-4	0.515 JB	0.0206	5.07	1
11031	1234789-HpCDF	55673-89-7	0.0805 JBQ	0.0292	5.07	1
11031	OCDF	39001-02-0	0.637 JBQ	0.0407	10.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	89	32 - 141
13C12-123678-HxCDD	89	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	98	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	85	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Page 3 of 4

Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435711
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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

Sample Description: SL-011-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435711
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/13/2011 09:00

Suite 210

Reported: 10/30/2011 16:18

Chantilly VA 20151

X4902 SDG#: DX149-02BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/24/2011 17:37	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1



Analysis Report

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Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435712
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	2.2	0.50	0.50	1

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

Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435712
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.9	0.0612	1.00	1
11031	12378-PeCDD	40321-76-4	105	0.0565	5.01	1
11031	123478-HxCDD	39227-28-6	98.4	0.0589	5.01	1
11031	123678-HxCDD	57653-85-7	93.6	0.0585	5.01	1
11031	123789-HxCDD	19408-74-3	100	0.0557	5.01	1
11031	1234678-HpCDD	35822-46-9	98.8	0.0725	5.01	1
11031	OCDD	3268-87-9	198	0.0661	10.0	1
11031	2378-TCDF	51207-31-9	19.7	0.0489	1.00	1
11031	12378-PeCDF	57117-41-6	101	0.0390	5.01	1
11031	23478-PeCDF	57117-31-4	96.0	0.0351	5.01	1
11031	123478-HxCDF	70648-26-9	101	0.0953	5.01	1
11031	123678-HxCDF	57117-44-9	98.7	0.0838	5.01	1
11031	123789-HxCDF	72918-21-9	99.8	0.0654	5.01	1
11031	234678-HxCDF	60851-34-5	95.0	0.0564	5.01	1
11031	1234678-HpCDF	67562-39-4	91.0	0.0676	5.01	1
11031	1234789-HpCDF	55673-89-7	96.5	0.0799	5.01	1
11031	OCDF	39001-02-0	196	0.0829	10.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	89	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	95	23 - 140
13C12-OCDD	102	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	51	26 - 152
13C12-123678-HxCDF	59	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	88	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Page 3 of 4

Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435712
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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

Page 4 of 4

Sample Description: SL-011-SA3-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435712
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/24/2011 18:34	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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



Analysis Report

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Page 1 of 4

Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435713
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	2.2	0.50	0.50	1

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

Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435713
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.3	0.0699	1.01	1
11031	12378-PeCDD	40321-76-4	105 B	0.0629	5.07	1
11031	123478-HxCDD	39227-28-6	99.0 B	0.0538	5.07	1
11031	123678-HxCDD	57653-85-7	96.8	0.0545	5.07	1
11031	123789-HxCDD	19408-74-3	103 B	0.0521	5.07	1
11031	1234678-HpCDD	35822-46-9	101 B	0.0719	5.07	1
11031	OCDD	3268-87-9	199 B	0.0753	10.1	1
11031	2378-TCDF	51207-31-9	19.6	0.0595	1.01	1
11031	12378-PeCDF	57117-41-6	103 B	0.0421	5.07	1
11031	23478-PeCDF	57117-31-4	94.4 B	0.0376	5.07	1
11031	123478-HxCDF	70648-26-9	98.6 B	0.100	5.07	1
11031	123678-HxCDF	57117-44-9	99.1 B	0.0888	5.07	1
11031	123789-HxCDF	72918-21-9	99.7 B	0.0642	5.07	1
11031	234678-HxCDF	60851-34-5	96.5 B	0.0557	5.07	1
11031	1234678-HpCDF	67562-39-4	91.6 B	0.0789	5.07	1
11031	1234789-HpCDF	55673-89-7	97.4 B	0.0807	5.07	1
11031	OCDF	39001-02-0	194 B	0.0662	10.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	103	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	50	26 - 152
13C12-123678-HxCDF	54	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	92	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Page 3 of 4

Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435713
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

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



Analysis Report

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

Page 4 of 4

Sample Description: SL-011-SA3-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435713
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4902 SDG#: DX149-02MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/24/2011 19:30	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

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



Analysis Report

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

Page 1 of 4

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435714
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4903 SDG#: DX149-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	4.3	0.50	0.50	1

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

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435714
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4903 SDG#: DX149-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0540 JQ	0.0499	0.997	1
11031	12378-PeCDD	40321-76-4	0.162 JB	0.0452	4.99	1
11031	123478-HxCDD	39227-28-6	0.184 JBQ	0.0419	4.99	1
11031	123678-HxCDD	57653-85-7	0.468 JQ	0.0425	4.99	1
11031	123789-HxCDD	19408-74-3	0.396 JB	0.0419	4.99	1
11031	1234678-HpCDD	35822-46-9	6.84 B	0.0581	4.99	1
11031	OCDD	3268-87-9	101 B	0.0596	9.97	1
11031	2378-TCDF	51207-31-9	0.0429 U	0.0429	0.997	1
11031	12378-PeCDF	57117-41-6	0.135 JBQ	0.0250	4.99	1
11031	23478-PeCDF	57117-31-4	0.219 JBQ	0.0235	4.99	1
11031	123478-HxCDF	70648-26-9	0.0644 JB	0.0333	4.99	1
11031	123678-HxCDF	57117-44-9	0.143 JB	0.0289	4.99	1
11031	123789-HxCDF	72918-21-9	0.251 JB	0.0299	4.99	1
11031	234678-HxCDF	60851-34-5	0.163 JBQ	0.0250	4.99	1
11031	1234678-HpCDF	67562-39-4	1.07 JB	0.0240	4.99	1
11031	1234789-HpCDF	55673-89-7	0.152 JBQ	0.0340	4.99	1
11031	OCDF	39001-02-0	2.53 JB	0.0419	9.97	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	100	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	87	17 - 157

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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

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Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435714
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

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

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4903 SDG#: DX149-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-096-SA7-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435714
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4903 SDG#: DX149-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/24/2011 20:27	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435715
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4904 SDG#: DX149-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	2.4	0.50	0.50	1

Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435715
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4904 SDG#: DX149-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0428 U	0.0428	1.01	1
11031	12378-PeCDD	40321-76-4	0.0790 JBQ	0.0455	5.05	1
11031	123478-HxCDD	39227-28-6	0.0523 JBQ	0.0329	5.05	1
11031	123678-HxCDD	57653-85-7	0.161 J	0.0351	5.05	1
11031	123789-HxCDD	19408-74-3	0.126 JB	0.0356	5.05	1
11031	1234678-HpCDD	35822-46-9	1.37 JB	0.0434	5.05	1
11031	OCDD	3268-87-9	11.1 B	0.0418	10.1	1
11031	2378-TCDF	51207-31-9	0.0730 J	0.0502	1.01	1
11031	12378-PeCDF	57117-41-6	0.0458 JB	0.0371	5.05	1
11031	23478-PeCDF	57117-31-4	0.572 JB	0.0342	5.05	1
11031	123478-HxCDF	70648-26-9	0.431 JB	0.0380	5.05	1
11031	123678-HxCDF	57117-44-9	0.151 JB	0.0355	5.05	1
11031	123789-HxCDF	72918-21-9	0.0620 JBQ	0.0390	5.05	1
11031	234678-HxCDF	60851-34-5	0.187 JB	0.0324	5.05	1
11031	1234678-HpCDF	67562-39-4	0.551 JB	0.0200	5.05	1
11031	1234789-HpCDF	55673-89-7	0.103 JBQ	0.0260	5.05	1
11031	OCDF	39001-02-0	1.02 JB	0.0356	10.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	95	32 - 141
13C12-123678-HxCDD	96	28 - 130
13C12-123789-HxCDD	92	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	103	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	91	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	88	26 - 138
13C12-OCDF	94	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present



Analysis Report

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Page 3 of 4

Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435715
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4904 SDG#: DX149-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

Sample Description: DUP01-SA3-QC-101211 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SA3-QC-101211

LLI Sample # SW 6435715
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4904 SDG#: DX149-04FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/24/2011 21:23	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401A	10/25/2011 18:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-SA3-SB-101211 Water
SSFL Area IV Collocated Soil Sampling
EB-SA3-SB-101211

LLI Sample # WW 6435716
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4905 SDG#: DX149-05EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.436 JQ	0.376	2.03	1
10915	12378-PeCDD	40321-76-4	0.499 JBQ	0.325	10.2	1
10915	123478-HxCDD	39227-28-6	0.305 JQ	0.233	10.2	1
10915	123678-HxCDD	57653-85-7	0.290 JQ	0.243	10.2	1
10915	123789-HxCDD	19408-74-3	0.265 JBQ	0.221	10.2	1
10915	1234678-HpCDD	35822-46-9	3.15 JBQ	0.296	10.2	1
10915	OCDD	3268-87-9	8.35 JB	0.234	20.3	1
10915	2378-TCDF	51207-31-9	0.279 U	0.279	2.03	1
10915	12378-PeCDF	57117-41-6	0.248 JBQ	0.166	10.2	1
10915	23478-PeCDF	57117-31-4	0.485 JB	0.152	10.2	1
10915	123478-HxCDF	70648-26-9	0.319 JBQ	0.150	10.2	1
10915	123678-HxCDF	57117-44-9	0.337 JBQ	0.149	10.2	1
10915	123789-HxCDF	72918-21-9	0.243 JBQ	0.158	10.2	1
10915	234678-HxCDF	60851-34-5	0.426 JBQ	0.139	10.2	1
10915	1234678-HpCDF	67562-39-4	1.86 JB	0.127	10.2	1
10915	1234789-HpCDF	55673-89-7	0.238 JBQ	0.143	10.2	1
10915	OCDF	39001-02-0	1.46 JB	0.285	20.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present



Analysis Report

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Page 2 of 2

Sample Description: EB-SA3-SB-101211 Water
SSFL Area IV Collocated Soil Sampling
EB-SA3-SB-101211

LLI Sample # WW 6435716
LLI Group # 1271038
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/13/2011 09:00

Reported: 10/30/2011 16:18

X4905 SDG#: DX149-05EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11292001	10/21/2011 19:21	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	11292001	10/19/2011 06:40	Ginelle L Haines	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/30/11 at 04:18 PM

Group Number: 1271038

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11298162401A	Sample number(s): 6435711-6435715				100		80-120		
Moisture Content by 160.3									

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11292001	Sample number(s): 6435716								
2378-TCDD	0.360 U	0.360	2.00	pg/l	103		67-158		
12378-PeCDD	0.541 J	0.280	10.0	pg/l	100		70-142		
123478-HxCDD	0.226 U	0.226	10.0	pg/l	97		70-164		
123678-HxCDD	0.230 U	0.230	10.0	pg/l	94		76-134		
123789-HxCDD	0.623 J	0.222	10.0	pg/l	100		64-162		
1234678-HpCDD	2.75 J	0.205	10.0	pg/l	99		70-140		
OCDD	5.09 J	0.237	20.0	pg/l	98		78-144		
2378-TCDF	0.242 U	0.242	2.00	pg/l	90		75-158		
12378-PeCDF	0.414 J	0.162	10.0	pg/l	100		80-134		
23478-PeCDF	0.934 J	0.145	10.0	pg/l	90		68-160		
123478-HxCDF	0.536 J	0.145	10.0	pg/l	98		72-134		
123678-HxCDF	0.592 J	0.145	10.0	pg/l	97		84-130		
123789-HxCDF	0.484 J	0.164	10.0	pg/l	97		78-130		
234678-HxCDF	0.606 J	0.139	10.0	pg/l	94		70-156		
1234678-HpCDF	2.04 J	0.125	10.0	pg/l	90		82-122		
1234789-HpCDF	0.351 J	0.138	10.0	pg/l	96		78-138		
OCDF	1.52 J	0.243	20.0	pg/l	98		63-170		

Batch number: 11294002	Sample number(s): 6435711-6435715								
2378-TCDD	0.0609 U	0.0609	1.00	ng/kg	107		67-158		
12378-PeCDD	0.0460 J	0.0441	5.00	ng/kg	105		70-142		
123478-HxCDD	0.0460 J	0.0278	5.00	ng/kg	100		70-164		
123678-HxCDD	0.0276 U	0.0276	5.00	ng/kg	94		76-134		
123789-HxCDD	0.0516 J	0.0279	5.00	ng/kg	102		64-162		
1234678-HpCDD	0.267 J	0.0317	5.00	ng/kg	100		70-140		
OCDD	0.461 J	0.0245	10.0	ng/kg	95		78-144		
2378-TCDF	0.0429 U	0.0429	1.00	ng/kg	97		75-158		
12378-PeCDF	0.0382 J	0.0220	5.00	ng/kg	102		80-134		
23478-PeCDF	0.0374 J	0.0203	5.00	ng/kg	96		68-160		
123478-HxCDF	0.0843 J	0.0241	5.00	ng/kg	97		72-134		
123678-HxCDF	0.0224 J	0.0214	5.00	ng/kg	98		84-130		
123789-HxCDF	0.0575 J	0.0180	5.00	ng/kg	98		78-130		
234678-HxCDF	0.0541 J	0.0162	5.00	ng/kg	96		70-156		
1234678-HpCDF	0.154 J	0.0152	5.00	ng/kg	92		82-122		
1234789-HpCDF	0.0824 J	0.0190	5.00	ng/kg	96		78-138		
OCDF	0.172 J	0.0394	10.0	ng/kg	97		63-170		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/30/11 at 04:18 PM

Group Number: 1271038

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11298162401A Moisture Content by 160.3	Sample number(s): 6435711-6435715				BKG: P435690 2.2		2.3	4 (1)	20
Batch number: 11294002	Sample number(s): 6435711-6435715				UNSPK: 6435711				
2378-TCDD	109	105	67-158	3	25				
12378-PeCDD	105	104	70-142	0	25				
123478-HxCDD	98	98	70-164	1	25				
123678-HxCDD	93	95	76-134	3	25				
123789-HxCDD	100	102	64-162	3	25				
1234678-HpCDD	98	99	70-140	3	25				
OCDD	96	95	78-144	1	25				
2378-TCDF	98	97	75-158	0	25				
12378-PeCDF	101	102	80-134	2	25				
23478-PeCDF	96	93	68-160	2	25				
123478-HxCDF	100	97	72-134	2	25				
123678-HxCDF	98	98	84-130	0	25				
123789-HxCDF	100	98	78-130	0	25				
234678-HxCDF	95	95	70-156	2	25				
1234678-HpCDF	90	90	82-122	1	25				
1234789-HpCDF	96	96	78-138	1	25				
OCDF	97	95	63-170	1	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11292001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6435716	74	75	69	70	72	75
Blank	66	73	67	67	70	72
OPR	71	69	68	69	70	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
6435716	75	80	83	74	76	76
Blank	75	82	89	71	73	75
OPR	74	76	77	69	72	75
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/30/11 at 04:18 PM

Group Number: 1271038

Surrogate Quality Control

6435716	77	83	85	75	73	
Blank	74	83	92	72	71	
OPR	74	79	81	72	68	
Limits:	28-130	23-140	17-157	24-169	24-185	
Analysis Name: 10a Dioxin/Furan by EPA 1613B						
Batch number: 11294002						
	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6435711	73	79	68	77	81	77
6435712	76	80	51	59	84	85
6435713	72	79	50	54	81	84
6435714	73	77	63	69	77	78
6435715	80	82	73	80	91	87
Blank	86	88	61	70	88	96
MS	76	80	51	59	84	85
MSD	72	79	50	54	81	84
OPR	74	77	60	69	78	83
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
6435711	92	81	85	80	89	89
6435712	77	83	88	81	90	89
6435713	72	83	92	79	83	84
6435714	88	79	87	78	83	84
6435715	93	88	94	81	95	96
Blank	92	93	100	92	92	97
MS	77	83	88	81	90	89
MSD	72	83	92	79	83	84
OPR	88	82	87	81	86	87
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
6435711	86	91	98	73	82	
6435712	89	95	102	78	84	
6435713	85	92	103	72	79	
6435714	83	90	100	73	80	
6435715	92	96	103	82	85	
Blank	96	108	118	82	92	
MS	89	95	102	78	84	
MSD	85	92	103	72	79	
OPR	86	95	103	73	81	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

acct #13013 Cp# 1271038

sample # 6435711-16

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes	
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.		SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 8010/8020/8471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCPs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7189	*pH EPA 8045C/9040B	Perchlorate Confirmation by EPA 8850 (10%)	TPH-GRO EPA 8015B \$	*TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	*Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Emergellus EPA 8330A	**Cyanide EPA 8012B	**Terphenyls EPA 8016B	**Glycols EPA 8015B	**Alcohols EPA 8015B		**Dowanol EPA 8270
		SL-011-SA3-SB-4.5MS	10.12.11	1019	SOIL	NONE	6-Encores									X												MS/MSD
		SL-011-SA3-SB-4.0-5.0MS	10.12.11	1025	SOIL	NONE	12-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X		
		SL-096-SA7-SB-2.5	10.12.11	1145	SOIL	NONE	2-Encores									X												
		SL-096-SA7-SB-2.0-3.0	10.12.11	1140	SOIL	NONE	1-SS Sleeve			X	X																	
		SL-096-SA7-SB-2.0-3.0	10.12.11	1140	SOIL	NONE	2-16 oz Jars	X	X		X	X	X	X			X	X	X	X	X	X	X	X	X	X		
		DUP01-SA3-QC-101211	10.12.11	1035	SOIL	NONE	2-Encores									X												
		DUP01-SA3-QC-101211	10.12.11	1035	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X		
		EB-SA3-SB-101211	10.12.11	1423	WATER	NONE	1-1 L Amber													X							HGL ASTM II WATER	
		TB-101211	10.12.11	0800	WATER	NONE	1-1 L Amber													X								
		TB-101211	10.12.11	0800	SOIL	NONE	1-4 oz Jar													X								
		TB-101211	10.12.11	0800	WATER	NONE	2-40 mL Vials									X												
Relinquished by: (Signature) 		Date/Time 10/12/2011 / 1630	Received for Laboratory by: (Signature) 																						Laboratory: Lancaster Laboratories, Inc.			
Received by: (Signature) 		Date/Time 10-13-11 900	Airbill No.(s) 8767 9857 5121,5512,5110																									

acc#13013 Cp#1271038

sample#6435711-16

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING				PRIMARY FOR ALL LOCATIONS												SECONDARY FOR ALL LOCATIONS												Other Instructions and Notes
NOTES: *Primary Analytes as indicated on sample labels **Secondary Analytes as indicated on sample labels \$ Moisture by EPA 180.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.						*Metals EPA 6010/62086/471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8092	*Dioxin/Furan EPA 1631B	*Perchlorate EPA 314.0	*Hex Chromat EPA 7189	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6950 (10%)	TPH-GRO EPA 8015B \$	**TPH-EFM EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 8012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	**Dowfax EPA 8270					
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																									
EB-SA3-SB-101211	10.12.11	1400	WATER	NONE	10-1 liter ambers			X	X	X						X			X	X		X								
EB-SA3-SB-101211	10.12.11	1400	WATER	NONE	1-500 mL poly		X					X	X	X											X					
EB-SA3-SB-101211	10.12.11	1400	WATER	HNO3	1-500 mL poly	X																								
EB-SA3-SB-101211	10.12.11	1400	WATER	NaOH	1-500 mL poly																									
EB-SA3-SB-101211	10.12.11	1400	WATER	NONE	1-250 mL glass													X												
EB-SA3-SB-101211	10.12.11	1400	WATER	HCL	11-40 mL vials										X			X						X						
EB-SA3-SB-101211	10.12.11	1400	WATER	NONE	4-40 mL vials												X					X								
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)														Laboratory:												
		10/12/2011 / 1630																Lancaster Laboratories, Inc.												
Received by: (Signature)		Date/Time		Airbill No.(s)																										
Bryanby Budy		10-13-11 9a		8767 9857 5121,5512,5110																										

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Thursday, October 13, 2011 2:05 PM
To: Nicole Maljovec
Subject: RE: Bottles and such

I think I put an incorrect label on all of our EBs for yesterday. The COC is correct, they should be called EB-SA3-SB-101211. I think I labeled them with SA7 instead.

Pls let me know if there's a problem with these ! Thanks

Pamela Hartman
CDM
523 W 6th St #400
Los Angeles, CA 90014
Cell 714-900-0916
Direct 818-466-8007

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]
Sent: Thursday, October 13, 2011 10:23 AM
To: Hartman, Pamela
Subject: RE: Bottles and such

I was thinking about that. I'll put in an order for 10 Water NDMA TBs and 10 Soil NDMA TBs right now. It takes about 4 days to get the bottles to you, so you should have them by 10/19.

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]
Sent: Thursday, October 13, 2011 1:18 PM
To: Nicole Maljovec
Subject: Bottles and such

Hi Nicole

Hope your week has been going well. I would like to put in an order for next week. Could we please have the following:

200 16 oz Jars
Extra round foam discs for packing between jars and bottles

Will we be receiving double soil and water trip blanks next week to cover our onsite sampling and the remote sampling for the week of Oct. 24th?

Thanks!

Pam

Pamela Hartman
CDM
523 W 6th St #400
Los Angeles, CA 90014
Cell 714-900-0916
Direct 818-466-8007

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

November 18, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/14/2011

Group Number: 1271284

SDG: DE268

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-005-SA3-SB-4.0-5.0 Soil	6437193
SL-005-SA3-SB-7.5-8.5 Soil	6437194
SL-089-SA7-SB-3.5-4.5 Soil	6437195
SL-089-SA7-SB-3.5-4.5MS Soil	6437196
SL-089-SA7-SB-3.5-4.5MSD Soil	6437197
SL-089-SA7-SB-3.5-4.5DUP Soil	6437198
SL-089-SA7-SB-3.5-4.5RL MS Soil	6437199
SL-089-SA7-SB-3.5-4.5RL LCS Soil	6437200
DUP09-SA7-QC-101311 Soil	6437201
EB-SA7-SB-101311 Water	6437202
TB-101311 Water	6437203
TB-101311 Sand	6437204
TB-101311 Water	6437205
EB-SA7-SB-101311 Water	6437206

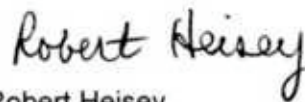
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey
Senior Specialist

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6801 SDG#: DE268-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	18.1 U	18.1	36.3		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	360	U 360	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6801 SDG#: DE268-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.8		1
10138	Anthracene	120-12-7	0.37	U 0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.0	J 0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.3	J 0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	2.4	U 0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	J 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.84	J 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U 6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U 6.6	20		1
10138	Chrysene	218-01-9	1.9	U 0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U 6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U 6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.2	J 6.6	20		1
10138	Fluoranthene	206-44-0	3.9	U 0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J 0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U 0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U 0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U 0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U 0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6	U 6.6	20		1
10138	Phenanthrene	85-01-8	1.8	J 0.73	1.8		1
10138	Pyrene	129-00-0	2.7	U 0.73	1.8		1
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U 0.2	0.9		21.59
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	64	U 64	130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	43	U 43	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	86	U 86	260	1000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6801 SDG#: DE268-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	86 U	86	260	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	43 U	43	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	43 U	43	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	43 U	43	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	320	1000000 0	1
10132	Nitrobenzene	98-95-3	43 U	43	130	1000000 0	1
10132	Nitroglycerin	55-63-0	860 U	860	2,600	1000000 0	1
10132	2-Nitrotoluene	88-72-2	86 U	86	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	86 U	86	130	1000000 0	1
10132	PETN	78-11-5	860 U	860	2,600	1000000 0	1
10132	RDX	121-82-4	54 U	54	130	1000000 0	1
10132	Tetryl	479-45-8	66 U	66	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	43 U	43	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	43 U	43	130	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	660 U	660	1,600		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36 U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36 U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36 U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43 U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6801 SDG#: DE268-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Summary. The following corrective action was taken: The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
GC Miscellaneous	SW-846 8015B		ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	550		1
10501	Isopropanol	67-63-0	110 U	110	550		1
10501	Methanol	67-56-1	110 U	110	550		1
GC Miscellaneous	SW-846 8015B modified		mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.5 U	5.5	11		1
08283	Ethylene glycol	107-21-1	5.5 U	5.5	11		1
08283	Propylene glycol	57-55-6	5.5 U	5.5	11		1
GC Petroleum Hydrocarbons	SW-846 8015B		mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.8		1
GC Petroleum Hydrocarbons	SW-846 8015B modified		mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44 U	0.44	1.3		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,700	6.63	21.9		1
07914	Boron	7440-42-8	0.394 U	0.394	5.48		1
01650	Calcium	7440-70-2	1,910	2.74	21.9		1
01654	Iron	7439-89-6	19,900	2.86	21.9		1
01656	Lithium	7439-93-2	19.1	0.68	2.2		1
01657	Magnesium	7439-95-4	3,610	0.482	11.0		1
06958	Manganese	7439-96-5	201	0.0394	0.548		1
10145	Phosphorus	7723-14-0	153	0.383	11.0		1
01662	Potassium	7440-09-7	1,800	12.0	53.2		1
01667	Sodium	7440-23-5	130	6.33	106		1
07968	Strontium	7440-24-6	21.3	0.0274	0.548		1
06969	Tin	7440-31-5	2.73 J	0.350	11.0		1
06970	Titanium	7440-32-6	1,210	0.0778	1.10		1
10146	Zirconium	7440-67-7	1.56 J	0.504	5.48		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6801 SDG#: DE268-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.106 J	0.0787	0.213		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.76	0.0851	0.425		2
06126	Barium	7440-39-3	113	0.113	0.425		2
06127	Beryllium	7440-41-7	0.861	0.0170	0.106		2
06128	Cadmium	7440-43-9	0.0489 J	0.0468	0.106		2
06131	Chromium	7440-47-3	18.0	0.128	0.425		2
06132	Cobalt	7440-48-4	6.22	0.0213	0.106		2
06133	Copper	7440-50-8	6.71	0.0851	0.425		2
06135	Lead	7439-92-1	6.14	0.0108	0.213		2
06138	Molybdenum	7439-98-7	0.715	0.0532	0.106		2
06139	Nickel	7440-02-0	11.4	0.106	0.425		2
06141	Selenium	7782-49-2	0.0769 J	0.0617	0.425		2
06142	Silver	7440-22-4	0.0647 J	0.0151	0.106		2
06145	Thallium	7440-28-0	0.311	0.0319	0.106		2
06148	Vanadium	7440-62-2	39.1	0.0234	0.106		2
06149	Zinc	7440-66-6	65.1	0.595	3.19		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0075 U	0.0075	0.107		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.89	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.6 J	0.89	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	32.9		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 J	0.22	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.55		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.11	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	8.7	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6801 SDG#: DE268-01

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-005-SA3-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11291SLG026	11/01/2011 23:04	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11290SLF026	10/20/2011 02:37	Holly Berry	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 10:07	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11291SLG026	10/19/2011 06:50	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLF026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11293A16A	10/21/2011 04:31	Laura M Krieger	21.59
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128725853	10/14/2011 16:20	Christopher D Meeks	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128725853	10/14/2011 16:21	Christopher D Meeks	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880015A	10/21/2011 03:15	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910003A	10/19/2011 21:00	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/21/2011 08:03	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910003A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880015A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900028A	10/18/2011 20:55	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112980042A	10/25/2011 22:11	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112920028A	10/21/2011 16:27	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112920027A	10/21/2011 01:39	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112920027A	10/20/2011 12:00	Olivia I Santiago	1
10303	Terphenyls soil prep	SW-846 3550B	1	112920028A	10/20/2011 12:00	Olivia I Santiago	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900028A	10/18/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112980042A	10/25/2011 18:25	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6801 SDG#: DE268-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 10:34	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 10:34	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 02:44	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 07:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 07:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 07:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 07:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 09:44	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11298495201A	10/25/2011 17:50	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11298495201A	10/25/2011 17:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201A	10/20/2011 13:41	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11291243201A	10/20/2011 16:22	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201A	10/21/2011 08:09	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11298495201A	10/25/2011 01:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201A	10/20/2011 06:30	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201A	10/20/2011 15:35	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402B	10/26/2011 15:00	Michele L Graham	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6801 SDG#: DE268-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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Analysis Report

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Page 1 of 8

Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6802 SDG#: DE268-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	19.7 U	19.7	39.3		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	590		1
04688	Benizidine	92-87-5	1,400	U 1,400	4,000		1
04688	Benzoic acid	65-85-0	200	U 200	590		1
04688	Benzyl alcohol	100-51-6	200	U 200	590		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200		1
04688	Carbazole	86-74-8	20	U 20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40	U 40	200		1
04688	4-Chloroaniline	106-47-8	79	U 79	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200		1
04688	2-Chlorophenol	95-57-8	20	U 20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U 40	200		1
04688	Dibenzofuran	132-64-9	20	U 20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	400		1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200		1
04688	2,4-Dimethylphenol	105-67-9	40	U 40	200		1
04688	3,5-Dimethylphenol	108-68-9	40	U 40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	590		1
04688	2,4-Dinitrophenol	51-28-5	400	U 400	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	40	U 40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200		1
04688	Hexachlorobenzene	118-74-1	20	U 20	200		1
04688	Hexachlorobutadiene	87-68-3	79	U 79	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	590		1
04688	Hexachloroethane	67-72-1	20	U 20	200		1
04688	Isophorone	78-59-1	20	U 20	200		1
04688	2-Methylphenol	95-48-7	40	U 40	200		1
04688	4-Methylphenol	106-44-5	40	U 40	200		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	20	U 20	200		1
04688	3-Nitroaniline	99-09-2	40	U 40	200		1
04688	4-Nitroaniline	100-01-6	79	U 79	200		1
04688	Nitrobenzene	98-95-3	20	U 20	200		1
04688	2-Nitrophenol	88-75-5	20	U 20	200		1
04688	4-Nitrophenol	100-02-7	200	U 200	590		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6802 SDG#: DE268-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U 200	590		1
04688	Phenol	108-95-2	20	U 20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U 20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U 40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U 40	200		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.79	U 0.79	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U 0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U 0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.79	U 0.79	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.79	U 0.79	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.79	U 0.79	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.79	U 0.79	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.79	U 0.79	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U 7.2	21		1
10138	Di-n-butylphthalate	84-74-2	7.2	U 7.2	21		1
10138	Chrysene	218-01-9	0.40	U 0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.79	U 0.79	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U 7.2	21		1
10138	Dimethylphthalate	131-11-3	7.2	U 7.2	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	18	J 7.2	21		1
10138	Fluoranthene	206-44-0	0.79	U 0.79	2.0		1
10138	Fluorene	86-73-7	0.79	U 0.79	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.79	U 0.79	2.0		1
10138	1-Methylnaphthalene	90-12-0	0.79	U 0.79	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.79	U 0.79	2.0		1
10138	Naphthalene	91-20-3	0.79	U 0.79	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.79	U 0.79	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2	U 7.2	21		1
10138	Phenanthrene	85-01-8	0.79	U 0.79	2.0		1
10138	Pyrene	129-00-0	0.79	U 0.79	2.0		1
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U 0.2	1		20.63
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	69	U 69	140	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	46	U 46	140	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	92	U 92	280	1000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 3 of 8

Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6802 SDG#: DE268-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	92 U	92	280	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	46 U	46	140	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	46 U	46	140	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	46 U	46	140	10000000	1
10132	HMX	2691-41-0	110 U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	46 U	46	140	10000000	1
10132	Nitroglycerin	55-63-0	920 U	920	2,800	10000000	1
10132	2-Nitrotoluene	88-72-2	92 U	92	140	10000000	1
10132	3-Nitrotoluene	99-08-1	110 U	110	140	10000000	1
10132	4-Nitrotoluene	99-99-0	92 U	92	140	10000000	1
10132	PETN	78-11-5	920 U	920	2,800	10000000	1
10132	RDX	121-82-4	57 U	57	140	10000000	1
10132	Tetryl	479-45-8	70 U	70	140	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	46 U	46	140	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	46 U	46	140	10000000	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	720 U	720	1,800		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.9		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39 U	0.39	2.0		1
10225	PCB-1221	11104-28-2	0.39 U	0.39	2.0		1
10225	PCB-1232	11141-16-5	0.39 U	0.39	2.0		1
10225	PCB-1242	53469-21-9	0.39 U	0.39	2.0		1
10225	PCB-1248	12672-29-6	0.39 U	0.39	2.0		1
10225	PCB-1254	11097-69-1	0.39 U	0.39	2.0		1
10225	PCB-1260	11096-82-5	0.46 U	0.46	2.0		1
10225	PCB-1262	37324-23-5	0.39 U	0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39 U	0.39	2.0		1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6802 SDG#: DE268-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Summary. The following corrective action was taken: The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
GC Miscellaneous	SW-846 8015B		ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120 U	120	600		1
10501	Isopropanol	67-63-0	120 U	120	600		1
10501	Methanol	67-56-1	120 U	120	600		1
GC Miscellaneous	SW-846 8015B modified		mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	6.0 U	6.0	12		1
08283	Ethylene glycol	107-21-1	6.0 U	6.0	12		1
08283	Propylene glycol	57-55-6	6.0 U	6.0	12		1
GC Petroleum Hydrocarbons	SW-846 8015B		mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.8 U	1.8	4.2		1
10318	o-Terphenyl	84-15-1	1.8 U	1.8	4.2		1
10318	p-Terphenyl	92-94-4	1.8 U	1.8	4.2		1
GC Petroleum Hydrocarbons	SW-846 8015B modified		mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.48 U	0.48	1.4		1
10199	EFH (C15-C20)	n.a.	0.48 U	0.48	1.4		1
10199	EFH (C21-C30)	n.a.	0.48 U	0.48	1.4		1
10199	EFH (C30 - C40)	n.a.	0.48 U	0.48	1.4		1
10199	EFH (C8-C11)	n.a.	0.48 U	0.48	1.4		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,300	7.14	23.6		1
07914	Boron	7440-42-8	0.425 U	0.425	5.90		1
01650	Calcium	7440-70-2	1,310	2.95	23.6		1
01654	Iron	7439-89-6	15,300	3.08	23.6		1
01656	Lithium	7439-93-2	18.6	0.73	2.4		1
01657	Magnesium	7439-95-4	3,200	0.519	11.8		1
06958	Manganese	7439-96-5	137	0.0425	0.590		1
10145	Phosphorus	7723-14-0	83.8	0.413	11.8		1
01662	Potassium	7440-09-7	2,170	13.3	59.0		1
01667	Sodium	7440-23-5	181	7.02	118		1
07968	Strontium	7440-24-6	15.7	0.0295	0.590		1
06969	Tin	7440-31-5	2.60 J	0.378	11.8		1
06970	Titanium	7440-32-6	1,090	0.0838	1.18		1
10146	Zirconium	7440-67-7	1.06 J	0.543	5.90		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6802 SDG#: DE268-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0882 U	0.0882	0.238		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.89	0.0954	0.477		2
06126	Barium	7440-39-3	65.0	0.126	0.477		2
06127	Beryllium	7440-41-7	0.518	0.0191	0.119		2
06128	Cadmium	7440-43-9	0.0524 U	0.0524	0.119		2
06131	Chromium	7440-47-3	14.0	0.143	0.477		2
06132	Cobalt	7440-48-4	4.28	0.0238	0.119		2
06133	Copper	7440-50-8	5.13	0.0954	0.477		2
06135	Lead	7439-92-1	3.65	0.0122	0.238		2
06138	Molybdenum	7439-98-7	0.212	0.0596	0.119		2
06139	Nickel	7440-02-0	7.76	0.119	0.477		2
06141	Selenium	7782-49-2	0.0691 U	0.0691	0.477		2
06142	Silver	7440-22-4	0.0206 J	0.0169	0.119		2
06145	Thallium	7440-28-0	0.265	0.0358	0.119		2
06148	Vanadium	7440-62-2	28.7	0.0262	0.119		2
06149	Zinc	7440-66-6	40.3	0.667	3.58		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0079 U	0.0079	0.112		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.96 U	0.96	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.7 J	0.96	1.8		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.7 U	10.7	35.8		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.2		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.57		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.27	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	16.1	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6802 SDG#: DE268-02

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-005-SA3-SB-8.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11291SLG026	11/01/2011 23:23	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11290SLF026	10/20/2011 03:03	Holly Berry	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 10:40	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11291SLG026	10/19/2011 06:50	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLF026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11293A16A	10/21/2011 05:09	Laura M Krieger	20.63
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128725853	10/14/2011 16:21	Christopher D Meeks	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128725853	10/14/2011 16:22	Christopher D Meeks	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880015A	10/21/2011 03:58	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910003A	10/19/2011 21:19	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/23/2011 04:57	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910003A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880015A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900028A	10/18/2011 21:12	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112980042A	10/25/2011 22:24	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112920028A	10/21/2011 16:49	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112920027A	10/21/2011 02:03	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112920027A	10/20/2011 12:00	Olivia I Santiago	1
10303	Terphenyls soil prep	SW-846 3550B	1	112920028A	10/20/2011 12:00	Olivia I Santiago	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900028A	10/18/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112980042A	10/25/2011 18:25	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1

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Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6802 SDG#: DE268-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 10:38	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 10:38	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 02:56	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 07:48	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/19/2011 18:39	Parker D Lindstrom	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 07:48	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 07:48	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 09:47	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11298495201A	10/25/2011 18:05	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11298495201A	10/25/2011 18:05	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201A	10/20/2011 14:04	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11291243201A	10/20/2011 16:28	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201A	10/21/2011 08:10	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11298495201A	10/25/2011 01:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201A	10/20/2011 06:30	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201A	10/20/2011 15:35	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402B	10/26/2011 15:00	Michele L Graham	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 8 of 8

Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6802 SDG#: DE268-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11291243201A	10/18/2011 10:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	18.8 U	18.8	37.5		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190		1
04688	4-Chloroaniline	106-47-8	75	U 75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	28	J 19	370		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	37	U 37	190		1
04688	4-Methylphenol	106-44-5	37	U 37	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	37	U 37	190		1
04688	4-Nitroaniline	100-01-6	75	U 75	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	Tetralin	119-64-2	190	U 190	190		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U 0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U 0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U 0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U 0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U 0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8	U 6.8	20		1
10138	Di-n-butylphthalate	84-74-2	6.8	U 6.8	20		1
10138	Chrysene	218-01-9	0.38	U 0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U 0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.8	U 6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8	U 6.8	20		1
10138	Fluoranthene	206-44-0	0.76	U 0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U 0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U 0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U 0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U 0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U 0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U 0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8	U 6.8	20		1
10138	Phenanthrene	85-01-8	0.76	U 0.76	1.9		1
10138	Pyrene	129-00-0	0.76	U 0.76	1.9		1
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.3	J 0.2	1.1		25.3
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U 68	140	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U 45	140	1000000	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	91 U	91	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	91 U	91	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	140	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	140	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	140	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	140	1000000 0	1
10132	Nitroglycerin	55-63-0	910 U	910	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	91 U	91	140	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	140	1000000 0	1
10132	4-Nitrotoluene	99-99-0	91 U	91	140	1000000 0	1
10132	PETN	78-11-5	910 U	910	2,700	1000000 0	1
10132	RDX	121-82-4	57 U	57	140	1000000 0	1
10132	Tetryl	479-45-8	69 U	69	140	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	140	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	140	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	680 U	680	1,700		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.37 U	0.37	1.9		1
10225	PCB-1232	11141-16-5	0.37 U	0.37	1.9		1
10225	PCB-1242	53469-21-9	0.37 U	0.37	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.44 U	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1

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Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
GC Miscellaneous	SW-846 8015B		ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	570		1
10501	Isopropanol	67-63-0	110 U	110	570		1
10501	Methanol	67-56-1	110 U	110	570		1
GC Miscellaneous	SW-846 8015B modified		mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7 U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7 U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7 U	5.7	11		1
GC Petroleum Hydrocarbons	SW-846 8015B		mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.0		1
GC Petroleum Hydrocarbons	SW-846 8015B modified		mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.45 U	0.45	1.4		1
10199	EFH (C15-C20)	n.a.	0.59 J	0.45	1.4		1
10199	EFH (C21-C30)	n.a.	2.5	0.45	1.4		1
10199	EFH (C30 - C40)	n.a.	6.2	0.45	1.4		1
10199	EFH (C8-C11)	n.a.	0.58 J	0.45	1.4		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,200	6.60	21.8		1
07914	Boron	7440-42-8	1.17 J	0.392	5.45		1
01650	Calcium	7440-70-2	3,860	2.73	21.8		1
01654	Iron	7439-89-6	22,900	2.85	21.8		1
01656	Lithium	7439-93-2	31.3	0.68	2.2		1
01657	Magnesium	7439-95-4	6,880	0.480	10.9		1
06958	Manganese	7439-96-5	340	0.0392	0.545		1
10145	Phosphorus	7723-14-0	493	0.382	10.9		1
01662	Potassium	7440-09-7	2,680	12.4	55.0		1
01667	Sodium	7440-23-5	134	6.55	110		1
07968	Strontium	7440-24-6	14.3	0.0273	0.545		1
06969	Tin	7440-31-5	2.96 J	0.349	10.9		1
06970	Titanium	7440-32-6	1,370	0.0774	1.09		1
10146	Zirconium	7440-67-7	1.02 J	0.501	5.45		1

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Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.153 J	0.0831	0.225		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.29	0.0898	0.449		2
06126	Barium	7440-39-3	96.4	0.119	0.449		2
06127	Beryllium	7440-41-7	0.548	0.0180	0.112		2
06128	Cadmium	7440-43-9	0.0810 J	0.0494	0.112		2
06131	Chromium	7440-47-3	19.6	0.135	0.449		2
06132	Cobalt	7440-48-4	6.53	0.0225	0.112		2
06133	Copper	7440-50-8	9.47	0.0898	0.449		2
06135	Lead	7439-92-1	5.14	0.0115	0.225		2
06138	Molybdenum	7439-98-7	0.301	0.0561	0.112		2
06139	Nickel	7440-02-0	13.1	0.112	0.449		2
06141	Selenium	7782-49-2	0.184 J	0.0651	0.449		2
06142	Silver	7440-22-4	0.0383 J	0.0159	0.112		2
06145	Thallium	7440-28-0	0.277	0.0337	0.112		2
06148	Vanadium	7440-62-2	38.8	0.0247	0.112		2
06149	Zinc	7440-66-6	62.3	0.629	3.37		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0077 J	0.0075	0.107		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	4.3	0.92	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	34.0		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.56		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.86	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	11.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

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Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03BKG

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-089-SA7-SB-4.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11291SLG026	11/01/2011 23:42	Matthew S Woods	1
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLF026	10/20/2011 03:28	Holly Berry	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 01:05	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11291SLG026	10/19/2011 06:50	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLF026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11293A16A	10/21/2011 02:00	Laura M Krieger	25.3
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128725853	10/14/2011 16:24	Christopher D Meeks	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128725853	10/14/2011 16:24	Christopher D Meeks	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880015A	10/21/2011 04:40	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910003A	10/19/2011 21:28	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/21/2011 08:41	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910003A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880015A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900028A	10/18/2011 21:28	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112980042A	10/25/2011 22:37	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112920028A	10/21/2011 20:08	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112920027A	10/21/2011 02:27	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112920027A	10/20/2011 12:00	Olivia I Santiago	1
10303	Terphenyls soil prep	SW-846 3550B	1	112920028A	10/20/2011 12:00	Olivia I Santiago	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900028A	10/18/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112980042A	10/25/2011 18:25	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 19:41	John P Hook	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01645	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 10:12	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 10:12	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 02:20	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 07:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 07:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 07:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 07:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 09:48	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11298495201A	10/25/2011 17:02	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11298495201A	10/25/2011 17:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201A	10/20/2011 11:45	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11292243201A	10/20/2011 15:33	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201B	10/21/2011 08:12	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11298495201A	10/25/2011 01:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201A	10/20/2011 06:30	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201B	10/20/2011 15:35	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402B	10/26/2011 15:00	Michele L Graham	1

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	916	18.9	37.8		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900	19	190		1
04688	Acenaphthylene	208-96-8	2,000	19	190		1
04688	Aniline	62-53-3	1,700	190	570		1
04688	Anthracene	120-12-7	1,900	19	190		1
04688	Benzidine	92-87-5	4,500	1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,900	190	190		1
04688	Benzo(a)pyrene	50-32-8	2,000	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	2,100	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	2,000	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800	19	190		1
04688	Benzoic acid	65-85-0	1,200	190	570		1
04688	Benzyl alcohol	100-51-6	2,000	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	2,000	19	190		1
04688	Butylbenzylphthalate	85-68-7	1,900	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,800	19	190		1
04688	Carbazole	86-74-8	1,800	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	2,000	38	190		1
04688	4-Chloroaniline	106-47-8	1,300	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	2,000	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	2,000	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	2,000	19	190		1
04688	2-Chloronaphthalene	91-58-7	1,500	19	190		1
04688	2-Chlorophenol	95-57-8	1,900	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	2,000	38	190		1
04688	Chrysene	218-01-9	1,800	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	2,100	19	190		1
04688	Dibenzofuran	132-64-9	1,900	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,700	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,700	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,700	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,400	110	380		1
04688	2,4-Dichlorophenol	120-83-2	2,000	19	190		1
04688	Diethylphthalate	84-66-2	1,800	19	190		1
04688	2,4-Dimethylphenol	105-67-9	2,000	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	1,900	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	650	190	570		1
04688	2,4-Dinitrophenol	51-28-5	1,200	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	1,900	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,900	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	2,100	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	19	380		1
04688	Fluoranthene	206-44-0	1,900	19	190		1
04688	Fluorene	86-73-7	1,900	19	190		1
04688	Hexachlorobenzene	118-74-1	2,000	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,900	75	190		1

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Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorocyclopentadiene	77-47-4	1,900	190	570		1
04688	Hexachloroethane	67-72-1	1,600	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	2,000	19	190		1
04688	Isophorone	78-59-1	2,100	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,900	19	190		1
04688	2-Methylphenol	95-48-7	2,000	38	190		1
04688	4-Methylphenol	106-44-5	2,000	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,900	19	190		1
04688	2-Nitroaniline	88-74-4	2,100	19	190		1
04688	3-Nitroaniline	99-09-2	1,900	38	190		1
04688	4-Nitroaniline	100-01-6	1,500	75	190		1
04688	Nitrobenzene	98-95-3	2,100	19	190		1
04688	2-Nitrophenol	88-75-5	2,000	19	190		1
04688	4-Nitrophenol	100-02-7	1,600	190	570		1
04688	N-Nitrosodimethylamine	62-75-9	2,100	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,900	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,900	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	2,100	19	190		1
04688	Pentachlorophenol	87-86-5	1,500	190	570		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	1,900	19	190		1
04688	Pyrene	129-00-0	1,800	19	190		1
04688	Tetralin	119-64-2	190	U 190	190		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	1,900	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	2,000	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	2,100	38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	35	0.76	1.9		1
10138	Acenaphthylene	208-96-8	34	0.38	1.9		1
10138	Anthracene	120-12-7	36	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	36	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	35	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	37	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	29	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	37	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	40	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	42	6.8	20		1
10138	Chrysene	218-01-9	36	0.38	1.9		1

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Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	Dibenz(a,h)anthracene	53-70-3	32	ug/kg	ug/kg	ug/kg	
10138	Diethylphthalate	84-66-2	39	0.76	1.9		1
10138	Dimethylphthalate	131-11-3	38	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	63	6.8	20		1
10138	Fluoranthene	206-44-0	37	0.76	1.9		1
10138	Fluorene	86-73-7	37	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	32	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	33	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	32	0.76	1.9		1
10138	Naphthalene	91-20-3	34	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	33	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	53	6.8	20		1
10138	Phenanthrene	85-01-8	34	0.76	1.9		1
10138	Pyrene	129-00-0	36	0.76	1.9		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	9.0	mg/kg	mg/kg	mg/kg	mg/kg
				0.2	1.1		24.13
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,400	ug/kg	ug/kg	ug/kg	ug/kg
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,400	68	140		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	91	45	140		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	91	91	270		1
10132	1,3-Dinitrobenzene	99-65-0	2,500	91	270		1
10132	2,4-Dinitrotoluene	121-14-2	2,200	45	140		1
10132	2,6-Dinitrotoluene	606-20-2	2,400	45	140		1
10132	HMX	2691-41-0	2,100	110	340		1
10132	Nitrobenzene	98-95-3	2,300	45	140		1
10132	Nitroglycerin	55-63-0	54,000	910	2,700		1
10132	2-Nitrotoluene	88-72-2	2,300	91	140		1
10132	3-Nitrotoluene	99-08-1	2,400	110	140		1
10132	4-Nitrotoluene	99-99-0	2,200	91	140		1
10132	PETN	78-11-5	57,000	910	2,700		1
10132	RDX	121-82-4	2,200	57	140		1
10132	Tetryl	479-45-8	2,000	69	140		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,200	45	140		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,300	45	140		1
HPLC Organics SW-846 8315A							
04173	20a Formaldehyde 8315A	50-00-0	5,600	ug/kg	ug/kg	ug/kg	ug/kg
				680	1,700		1
Pesticides/PCBs SW-846 8082							
10225	Aroclor 5432	63496-31-1	1.1	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7	1
10225	PCB-1016	12674-11-2	12	U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.37	U	0.37	1.9	1

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Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.37 U	0.37	1.9		1
10225	PCB-1242	53469-21-9	0.37 U	0.37	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9		1
10225	PCB-1260	11096-82-5	15	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	2,100	110	570		1
10501	Isopropanol	67-63-0	2,000	110	570		1
10501	Methanol	67-56-1	2,100	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	110	5.7	11		1
08283	Ethylene glycol	107-21-1	160	5.7	11		1
08283	Propylene glycol	57-55-6	170	5.7	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	9.0	1.7	4.0		1
10318	o-Terphenyl	84-15-1	9.6	1.7	4.0		1
10318	p-Terphenyl	92-94-4	9.1	1.7	4.0		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.78 J	0.45	1.4		1
10199	EFH (C15-C20)	n.a.	1.7	0.45	1.4		1
10199	EFH (C21-C30)	n.a.	5.0	0.45	1.4		1
10199	EFH (C30 - C40)	n.a.	9.3	0.45	1.4		1
10199	EFH (C8-C11)	n.a.	0.57 J	0.45	1.4		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,700	6.66	22.0		1
07914	Boron	7440-42-8	228	0.396	5.50		1
01650	Calcium	7440-70-2	4,550	2.75	22.0		1
01654	Iron	7439-89-6	25,500	2.87	22.0		1
01656	Lithium	7439-93-2	143	0.68	2.2		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals			mg/kg	mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	7,750	0.484	11.0		1
06958	Manganese	7439-96-5	365	0.0396	0.550		1
10145	Phosphorus	7723-14-0	588	0.385	11.0		1
01662	Potassium	7440-09-7	4,120	12.7	56.1		1
01667	Sodium	7440-23-5	1,240	6.68	112		1
07968	Strontium	7440-24-6	125	0.0275	0.550		1
06969	Tin	7440-31-5	400	0.352	11.0		1
06970	Titanium	7440-32-6	1,710	0.0782	1.10		1
10146	Zirconium	7440-67-7	108	0.506	5.50		1
SW-846 6010B			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.676	0.0823	0.222		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.53	0.0889	0.445		2
06126	Barium	7440-39-3	112	0.118	0.445		2
06127	Beryllium	7440-41-7	1.36	0.0178	0.111		2
06128	Cadmium	7440-43-9	1.32	0.0489	0.111		2
06131	Chromium	7440-47-3	30.2	0.133	0.445		2
06132	Cobalt	7440-48-4	65.2	0.0222	0.111		2
06133	Copper	7440-50-8	21.3	0.0889	0.445		2
06135	Lead	7439-92-1	9.11	0.0113	0.222		2
06138	Molybdenum	7439-98-7	11.9	0.0556	0.111		2
06139	Nickel	7440-02-0	25.5	0.111	0.445		2
06141	Selenium	7782-49-2	2.48	0.0645	0.445		2
06142	Silver	7440-22-4	11.5	0.0158	0.111		2
06145	Thallium	7440-28-0	0.737	0.0333	0.111		2
06148	Vanadium	7440-62-2	49.8	0.0245	0.111		2
06149	Zinc	7440-66-6	74.6	0.622	3.33		2
SW-846 7471A			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.194	0.0078	0.111		1
Wet Chemistry			mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.6	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	14.4	0.92	1.7		1
EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	647	10.2	34.0		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	38.9	1.1	5.5		5
SW-846 9012B			mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	5.6	0.20	0.56		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 160.3 modified							
11625	Moisture Content by 160.3	n.a.	11.8	0.50	0.50	%	1

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-089-SA7-SB-4.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11291SLG026	11/02/2011 00:20	Matthew S Woods	1
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLF026	10/20/2011 03:54	Holly Berry	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 01:38	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11291SLG026	10/19/2011 06:50	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLF026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11293A16A	10/21/2011 02:38	Laura M Krieger	24.13
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128725853	10/14/2011 16:24	Christopher D Meeks	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128725853	10/14/2011 16:25	Christopher D Meeks	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880015A	10/21/2011 05:22	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910003A	10/19/2011 21:38	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/21/2011 09:00	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910003A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880015A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900028A	10/18/2011 23:40	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112980042A	10/25/2011 22:50	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112920028A	10/21/2011 20:30	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112920027A	10/21/2011 02:51	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112920027A	10/20/2011 12:00	Olivia I Santiago	1
10303	Terphenyls soil prep	SW-846 3550B	1	112920028A	10/20/2011 12:00	Olivia I Santiago	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900028A	10/18/2011 17:00	Elizabeth J Marin	1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112980042A	10/25/2011 18:25	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 19:53	John P Hook	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 10:23	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 10:23	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 02:32	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 07:29	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 07:29	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 07:29	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 07:29	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 09:52	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11298495201A	10/25/2011 17:34	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11298495201A	10/25/2011 17:34	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201A	10/20/2011 12:32	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11292243201A	10/20/2011 15:55	Elyse P Brunstetter	5

*=This limit was used in the evaluation of the final result

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Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201B	10/21/2011 08:13	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11298495201A	10/25/2011 01:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201A	10/20/2011 06:30	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201B	10/20/2011 15:35	Carolyn M Mastropietro	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437197
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	902	18.9	37.8		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900	19	190		1
04688	Acenaphthylene	208-96-8	2,100	19	190		1
04688	Aniline	62-53-3	1,600	190	560		1
04688	Anthracene	120-12-7	1,900	19	190		1
04688	Benidine	92-87-5	3,800	1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,900	190	190		1
04688	Benzo(a)pyrene	50-32-8	2,000	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	2,100	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	2,000	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800	19	190		1
04688	Benzoic acid	65-85-0	730	190	560		1
04688	Benzyl alcohol	100-51-6	2,000	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	2,100	19	190		1
04688	Butylbenzylphthalate	85-68-7	1,900	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,900	19	190		1
04688	Carbazole	86-74-8	1,800	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	1,900	38	190		1
04688	4-Chloroaniline	106-47-8	1,300	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	2,000	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	2,000	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	2,000	19	190		1
04688	2-Chloronaphthalene	91-58-7	1,500	19	190		1
04688	2-Chlorophenol	95-57-8	2,000	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	2,000	38	190		1
04688	Chrysene	218-01-9	1,800	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	2,100	19	190		1
04688	Dibenzofuran	132-64-9	1,900	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,700	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,600	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,600	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,300	110	380		1
04688	2,4-Dichlorophenol	120-83-2	2,000	19	190		1
04688	Diethylphthalate	84-66-2	1,800	19	190		1
04688	2,4-Dimethylphenol	105-67-9	2,000	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	1,900	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	390	J 190	560		1
04688	2,4-Dinitrophenol	51-28-5	1,200	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	1,900	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	2,000	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	2,200	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	19	380		1
04688	Fluoranthene	206-44-0	1,900	19	190		1
04688	Fluorene	86-73-7	1,900	19	190		1
04688	Hexachlorobenzene	118-74-1	2,000	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,900	75	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437197
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorocyclopentadiene	77-47-4	2,600	190	560		1
04688	Hexachloroethane	67-72-1	1,600	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	2,000	19	190		1
04688	Isophorone	78-59-1	2,100	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,800	19	190		1
04688	2-Methylphenol	95-48-7	2,000	38	190		1
04688	4-Methylphenol	106-44-5	2,000	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,800	19	190		1
04688	2-Nitroaniline	88-74-4	2,100	19	190		1
04688	3-Nitroaniline	99-09-2	1,800	38	190		1
04688	4-Nitroaniline	100-01-6	1,500	75	190		1
04688	Nitrobenzene	98-95-3	2,100	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	1,500	190	560		1
04688	N-Nitrosodimethylamine	62-75-9	2,100	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,900	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	2,000	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	2,100	19	190		1
04688	Pentachlorophenol	87-86-5	1,100	190	560		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	2,000	19	190		1
04688	Pyrene	129-00-0	1,900	19	190		1
04688	Tetralin	119-64-2	190	U 190	190		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	1,900	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	2,000	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	38	0.76	1.9		1
10138	Acenaphthylene	208-96-8	37	0.38	1.9		1
10138	Anthracene	120-12-7	39	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	38	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	38	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	40	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	32	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	39	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	45	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	60	6.8	20		1
10138	Chrysene	218-01-9	38	0.38	1.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437197
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Dibenz(a,h)anthracene	53-70-3	35	0.76	1.9		1
10138	Diethylphthalate	84-66-2	48	6.8	20		1
10138	Dimethylphthalate	131-11-3	40	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	55	6.8	20		1
10138	Fluoranthene	206-44-0	39	0.76	1.9		1
10138	Fluorene	86-73-7	39	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	35	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	35	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	35	0.76	1.9		1
10138	Naphthalene	91-20-3	36	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	36	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	43	6.8	20		1
10138	Phenanthrene	85-01-8	37	0.76	1.9		1
10138	Pyrene	129-00-0	38	0.76	1.9		1
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	9.8	0.2	1.0		22.69
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,500	68	140		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,400	45	140		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	91	U	270		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	91	U	270		1
10132	1,3-Dinitrobenzene	99-65-0	2,500	45	140		1
10132	2,4-Dinitrotoluene	121-14-2	2,300	45	140		1
10132	2,6-Dinitrotoluene	606-20-2	2,400	45	140		1
10132	HMX	2691-41-0	2,100	110	340		1
10132	Nitrobenzene	98-95-3	2,400	45	140		1
10132	Nitroglycerin	55-63-0	54,000	910	2,700		1
10132	2-Nitrotoluene	88-72-2	2,300	91	140		1
10132	3-Nitrotoluene	99-08-1	2,500	110	140		1
10132	4-Nitrotoluene	99-99-0	2,300	91	140		1
10132	PETN	78-11-5	59,000	910	2,700		1
10132	RDX	121-82-4	2,200	57	140		1
10132	Tetryl	479-45-8	1,900	69	140		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,300	45	140		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,400	45	140		1
HPLC Organics	SW-846 8315A		ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	5,900	680	1,700		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	3.7		1
10225	PCB-1016	12674-11-2	12		1.9		1
10225	PCB-1221	11104-28-2	0.37	U	1.9		1

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Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437197
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.37 U	0.37	1.9		1
10225	PCB-1242	53469-21-9	0.37 U	0.37	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9		1
10225	PCB-1260	11096-82-5	16	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	2,100	110	570		1
10501	Isopropanol	67-63-0	2,000	110	570		1
10501	Methanol	67-56-1	2,000	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	110	5.7	11		1
08283	Ethylene glycol	107-21-1	160	5.7	11		1
08283	Propylene glycol	57-55-6	170	5.7	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	9.1	1.7	4.0		1
10318	o-Terphenyl	84-15-1	9.7	1.7	4.0		1
10318	p-Terphenyl	92-94-4	9.3	1.7	4.0		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.85 J	0.45	1.4		1
10199	EFH (C15-C20)	n.a.	2.0	0.45	1.4		1
10199	EFH (C21-C30)	n.a.	5.3	0.45	1.4		1
10199	EFH (C30 - C40)	n.a.	10	0.45	1.4		1
10199	EFH (C8-C11)	n.a.	0.62 J	0.45	1.4		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,600	6.72	22.2		1
07914	Boron	7440-42-8	227	0.400	5.56		1
01650	Calcium	7440-70-2	4,390	2.78	22.2		1
01654	Iron	7439-89-6	40,400	5.80	44.5		2
01656	Lithium	7439-93-2	140	0.69	2.2		1

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Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437197
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	7,340	0.489	11.1		1
06958	Manganese	7439-96-5	381	0.0400	0.556		1
10145	Phosphorus	7723-14-0	594	0.389	11.1		1
01662	Potassium	7440-09-7	3,990	12.4	55.0		1
01667	Sodium	7440-23-5	1,200	6.55	110		1
07968	Strontium	7440-24-6	123	0.0278	0.556		1
06969	Tin	7440-31-5	398	0.356	11.1		1
06970	Titanium	7440-32-6	1,690	0.0789	1.11		1
10146	Zirconium	7440-67-7	109	0.511	5.56		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.731	0.0831	0.225		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.72	0.0898	0.449		2
06126	Barium	7440-39-3	112	0.119	0.449		2
06127	Beryllium	7440-41-7	1.46	0.0180	0.112		2
06128	Cadmium	7440-43-9	1.29	0.0494	0.112		2
06131	Chromium	7440-47-3	33.1	0.135	0.449		2
06132	Cobalt	7440-48-4	67.4	0.0225	0.112		2
06133	Copper	7440-50-8	22.5	0.0898	0.449		2
06135	Lead	7439-92-1	10.1	0.0115	0.225		2
06138	Molybdenum	7439-98-7	12.7	0.0561	0.112		2
06139	Nickel	7440-02-0	26.2	0.112	0.449		2
06141	Selenium	7782-49-2	2.84	0.0651	0.449		2
06142	Silver	7440-22-4	12.3	0.0159	0.112		2
06145	Thallium	7440-28-0	0.823	0.0337	0.112		2
06148	Vanadium	7440-62-2	54.1	0.0247	0.112		2
06149	Zinc	7440-66-6	78.6	0.629	3.37		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.187	0.0077	0.109		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11625	Moisture Content by 160.3	n.a.	11.8	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-089-SA7-SB-4.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437197
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11291SLG026	11/02/2011 00:39	Matthew S Woods	1
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLF026	10/20/2011 04:19	Holly Berry	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 02:10	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11291SLG026	10/19/2011 06:50	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLF026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11293A16A	10/21/2011 03:16	Laura M Krieger	22.69
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128725853	10/14/2011 16:25	Christopher D Meeks	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128725853	10/14/2011 16:25	Christopher D Meeks	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880015A	10/21/2011 06:05	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910003A	10/19/2011 21:47	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/21/2011 09:19	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910003A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880015A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900028A	10/18/2011 23:57	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112980042A	10/25/2011 23:03	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112920028A	10/21/2011 20:52	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112920027A	10/21/2011 03:15	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112920027A	10/20/2011 12:00	Olivia I Santiago	1
10303	Terphenyls soil prep	SW-846 3550B	1	112920028A	10/20/2011 12:00	Olivia I Santiago	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900028A	10/18/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112980042A	10/25/2011 18:25	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 02:36	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 19:57	John P Hook	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 02:36	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 20:05	John P Hook	2
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 02:36	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 02:36	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 02:36	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 02:36	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 10:27	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 10:27	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 02:36	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 02:36	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 02:36	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 02:36	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437197
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 07:32	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 07:32	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 07:32	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 07:32	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 09:54	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 1 of 3

Sample Description: SL-089-SA7-SB-3.5-4.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437198
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,500	6.66	22.0		1
07914	Boron	7440-42-8	0.914 J	0.396	5.50		1
01650	Calcium	7440-70-2	3,910	2.75	22.0		1
01654	Iron	7439-89-6	23,400	2.87	22.0		1
01656	Lithium	7439-93-2	32.1	0.68	2.2		1
01657	Magnesium	7439-95-4	6,870	0.484	11.0		1
06958	Manganese	7439-96-5	313	0.0396	0.550		1
10145	Phosphorus	7723-14-0	459	0.385	11.0		1
01662	Potassium	7440-09-7	2,740	12.6	55.6		1
01667	Sodium	7440-23-5	130	6.61	111		1
07968	Strontium	7440-24-6	13.7	0.0275	0.550		1
06969	Tin	7440-31-5	2.78 J	0.352	11.0		1
06970	Titanium	7440-32-6	1,340	0.0782	1.10		1
10146	Zirconium	7440-67-7	1.52 J	0.506	5.50		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.142 J	0.0807	0.218		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.30	0.0872	0.436		2
06126	Barium	7440-39-3	106	0.116	0.436		2
06127	Beryllium	7440-41-7	0.610	0.0174	0.109		2
06128	Cadmium	7440-43-9	0.0998 J	0.0480	0.109		2
06131	Chromium	7440-47-3	23.3	0.131	0.436		2
06132	Cobalt	7440-48-4	7.09	0.0218	0.109		2
06133	Copper	7440-50-8	11.4	0.0872	0.436		2
06135	Lead	7439-92-1	5.90	0.0111	0.218		2
06138	Molybdenum	7439-98-7	0.328	0.0545	0.109		2
06139	Nickel	7440-02-0	15.7	0.109	0.436		2
06141	Selenium	7782-49-2	0.174 J	0.0632	0.436		2
06142	Silver	7440-22-4	0.0322 J	0.0155	0.109		2
06145	Thallium	7440-28-0	0.322	0.0327	0.109		2
06148	Vanadium	7440-62-2	46.4	0.0240	0.109		2
06149	Zinc	7440-66-6	72.6	0.611	3.27		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0078 U	0.0078	0.111		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.0	0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	4.2	0.91	1.7		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	34.0		1
SW-846 7199							
			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.5	0.22	1.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437198
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05895	16a Cyanide by 9012B	SW-846 9012B 57-12-5	mg/kg 0.20 U	mg/kg 0.20	mg/kg 0.56	mg/kg	1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.90	0.0100	0.0100		1
Wet Chemistry							
		EPA 160.3 modified	%	%	%	%	
11626	28a Moisture Content by 160.3	n.a.	11.7	0.50	0.50		1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						
11625	Moisture Content by 160.3	n.a.	11.8	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 19:49	John P Hook	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 10:20	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 10:20	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 02:28	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 07:26	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

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Sample Description: SL-089-SA7-SB-3.5-4.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437198
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 07:26	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 07:26	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 07:26	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 09:51	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11298495201A	10/25/2011 17:18	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11298495201A	10/25/2011 17:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201A	10/20/2011 12:09	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11292243201A	10/20/2011 16:38	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201B	10/21/2011 08:14	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11298495201A	10/25/2011 01:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201A	10/20/2011 06:30	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201B	10/20/2011 15:35	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402B	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1

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Analysis Report

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Page 1 of 3

Sample Description: SL-089-SA7-SB-3.5-4.5RL MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437199
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03RLR

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	110 J	68	140	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	120 J	45	140	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	91 U	91	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	91 U	91	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	120 J	45	140	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	110 J	45	140	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	110 J	45	140	1000000 0	1
10132	HMX	2691-41-0	130 J	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	110 J	45	140	1000000 0	1
10132	Nitroglycerin	55-63-0	2,900	910	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	140	91	140	1000000 0	1
10132	3-Nitrotoluene	99-08-1	120 J	110	140	1000000 0	1
10132	4-Nitrotoluene	99-99-0	110 J	91	140	1000000 0	1
10132	PETN	78-11-5	2,800	910	2,700	1000000 0	1
10132	RDX	121-82-4	91 J	57	140	1000000 0	1
10132	Tetryl	479-45-8	72 J	69	140	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	120 J	45	140	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	110 J	45	140	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	2,100	680	1,700		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7		1
10225	PCB-1016	12674-11-2	1.5 J	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.37 U	0.37	1.9		1
10225	PCB-1232	11141-16-5	0.37 U	0.37	1.9		1
10225	PCB-1242	53469-21-9	0.37 U	0.37	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1

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Sample Description: SL-089-SA7-SB-3.5-4.5RL MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437199
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03RLR

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9		1
10225	PCB-1260	11096-82-5	1.6 J	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	530 J	110	570		1
10501	Isopropanol	67-63-0	470 J	110	570		1
10501	Methanol	67-56-1	510 J	110	570		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.8 J	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.9 J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.0		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.45 U	0.45	1.4		1
10199	EFH (C15-C20)	n.a.	1.0 J	0.45	1.4		1
10199	EFH (C21-C30)	n.a.	3.6	0.45	1.4		1
10199	EFH (C30 - C40)	n.a.	7.7	0.45	1.4		1
10199	EFH (C8-C11)	n.a.	0.45 U	0.45	1.4		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11625	Moisture Content by 160.3	n.a.	11.8	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5RL MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437199
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03RLR

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10132	15a Energetics by 8330A	SW-846 8330A	1	112880015A	10/21/2011 08:12	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910003A	10/19/2011 21:57	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/21/2011 10:53	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910003A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880015A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900028A	10/19/2011 00:13	Elizabeth J Marin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112920028A	10/21/2011 19:24	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112920027A	10/21/2011 03:39	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112920027A	10/20/2011 12:00	Olivia I Santiago	1
10303	Terphenyls soil prep	SW-846 3550B	1	112920028A	10/20/2011 12:00	Olivia I Santiago	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900028A	10/18/2011 17:00	Elizabeth J Marin	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 1 of 3

Sample Description: SL-089-SA7-SB-3.5-4.5RL LCS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437200
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03RLQ

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	120	J 60	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	110	J 40	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	80	U 80	240	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	80	U 80	240	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	110	J 40	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	110	J 40	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	110	J 40	120	1000000 0	1
10132	HMX	2691-41-0	110	J 100	300	1000000 0	1
10132	Nitrobenzene	98-95-3	98	J 40	120	1000000 0	1
10132	Nitroglycerin	55-63-0	2,100	J 800	2,400	1000000 0	1
10132	2-Nitrotoluene	88-72-2	110	J 80	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	120	J 100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	120	80	120	1000000 0	1
10132	PETN	78-11-5	2,500	800	2,400	1000000 0	1
10132	RDX	121-82-4	100	J 50	120	1000000 0	1
10132	Tetryl	479-45-8	100	J 61	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	110	J 40	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	110	J 40	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	1,800	600	1,500		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0	U 1.0	3.3		1
10225	Aroclor 5442	12642-23-8	1.0	U 1.0	3.3		1
10225	Aroclor 5460	11126-42-4	1.0	U 1.0	3.3		1
10225	PCB-1016	12674-11-2	1.4	J 0.33	1.7		1
10225	PCB-1221	11104-28-2	0.33	U 0.33	1.7		1
10225	PCB-1232	11141-16-5	0.33	U 0.33	1.7		1
10225	PCB-1242	53469-21-9	0.33	U 0.33	1.7		1
10225	PCB-1248	12672-29-6	0.33	U 0.33	1.7		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5RL LCS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437200
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03RLQ

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.33 U	0.33	1.7		1
10225	PCB-1260	11096-82-5	1.7	0.39	1.7		1
10225	PCB-1262	37324-23-5	0.33 U	0.33	1.7		1
10225	PCB-1268	11100-14-4	0.33 U	0.33	1.7		1
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	610	100	500		1
10501	Isopropanol	67-63-0	530	100	500		1
10501	Methanol	67-56-1	600	100	500		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 J	1.5	3.5		1
10318	o-Terphenyl	84-15-1	1.7 J	1.5	3.5		1
10318	p-Terphenyl	92-94-4	1.5 U	1.5	3.5		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.40 U	0.40	1.2		1
10199	EFH (C15-C20)	n.a.	0.72 J	0.40	1.2		1
10199	EFH (C21-C30)	n.a.	1.3	0.40	1.2		1
10199	EFH (C30 - C40)	n.a.	2.2	0.40	1.2		1
10199	EFH (C8-C11)	n.a.	0.40 U	0.40	1.2		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10132	15a Energetics by 8330A	SW-846 8330A	1	112880015A	10/21/2011 08:55	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910003A	10/19/2011 22:06	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/21/2011 11:12	Jessica L Miller	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA7-SB-3.5-4.5RL LCS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437200
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6803 SDG#: DE268-03RLQ

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910003A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880015A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900028A	10/19/2011 00:30	Elizabeth J Marin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112920028A	10/21/2011 17:11	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112920027A	10/21/2011 04:03	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112920027A	10/20/2011 12:00	Olivia I Santiago	1
10303	Terphenyls soil prep	SW-846 3550B	1	112920028A	10/20/2011 12:00	Olivia I Santiago	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900028A	10/18/2011 17:00	Elizabeth J Marin	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437201
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6804 SDG#: DE268-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	18.4 U	18.4	36.9		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	74	U 74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U 74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	74	U 74	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437201
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6804 SDG#: DE268-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	Tetralin	119-64-2	180	U 180	180		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
GC/MS	Semivolatiles SW-846 8270C SIM		ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U 0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.9		1
10138	Anthracene	120-12-7	0.37	U 0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	8.7	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	14	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	18	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	9.0	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	6.6	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.7	U 6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7	U 6.7	20		1
10138	Chrysene	218-01-9	10	0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	2.2	0.75	1.9		1
10138	Diethylphthalate	84-66-2	6.7	U 6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U 6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	28	6.7	20		1
10138	Fluoranthene	206-44-0	8.7	0.75	1.9		1
10138	Fluorene	86-73-7	0.75	U 0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	8.3	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.75	U 0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.75	U 0.75	1.9		1
10138	Naphthalene	91-20-3	0.75	U 0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U 0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7	U 6.7	20		1
10138	Phenanthrene	85-01-8	1.0	J 0.75	1.9		1
10138	Pyrene	129-00-0	8.9	0.75	1.9		1
GC Volatiles	TPH GRO SW-846 8015B mod		mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U 0.2	1.1		24.08
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U 67	130	10000000	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437201
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6804 SDG#: DE268-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45 U	45	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90 U	90	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90 U	90	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	130	1000000 0	1
10132	Nitroglycerin	55-63-0	900 U	900	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	90 U	90	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	90 U	90	130	1000000 0	1
10132	PETN	78-11-5	900 U	900	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	130	1000000 0	1
10132	Tetryl	479-45-8	69 U	69	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	130	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	670 U	670	1,700		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	14	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.37 U	0.37	1.9		1
10225	PCB-1232	11141-16-5	0.37 U	0.37	1.9		1
10225	PCB-1242	53469-21-9	0.37 U	0.37	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	1.5 J	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.90 J	0.44	1.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437201
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6804 SDG#: DE268-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	560		1
10501	Isopropanol	67-63-0	110 U	110	560		1
10501	Methanol	67-56-1	110 U	110	560		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.6 U	5.6	11		1
08283	Ethylene glycol	107-21-1	5.6 U	5.6	11		1
08283	Propylene glycol	57-55-6	5.6 U	5.6	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	3.9		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.45 U	0.45	1.3		1
10199	EFH (C15-C20)	n.a.	0.63 J	0.45	1.3		1
10199	EFH (C21-C30)	n.a.	2.3	0.45	1.3		1
10199	EFH (C30 - C40)	n.a.	6.4	0.45	1.3		1
10199	EFH (C8-C11)	n.a.	0.45 U	0.45	1.3		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,800	6.58	21.8		1
07914	Boron	7440-42-8	1.17 J	0.392	5.44		1
01650	Calcium	7440-70-2	3,810	2.72	21.8		1
01654	Iron	7439-89-6	22,600	2.84	21.8		1
01656	Lithium	7439-93-2	28.7	0.67	2.2		1
01657	Magnesium	7439-95-4	6,610	0.479	10.9		1
06958	Manganese	7439-96-5	320	0.0392	0.544		1
10145	Phosphorus	7723-14-0	447	0.381	10.9		1
01662	Potassium	7440-09-7	2,440	12.2	53.9		1
01667	Sodium	7440-23-5	116	6.41	108		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437201
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6804 SDG#: DE268-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
07968	Strontium	7440-24-6	13.3	0.0272	0.544		1
06969	Tin	7440-31-5	2.56 J	0.348	10.9		1
06970	Titanium	7440-32-6	1,300	0.0773	1.09		1
10146	Zirconium	7440-67-7	0.813 J	0.501	5.44		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0805 U	0.0805	0.218		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.70	0.0871	0.435		2
06126	Barium	7440-39-3	100	0.115	0.435		2
06127	Beryllium	7440-41-7	0.650	0.0174	0.109		2
06128	Cadmium	7440-43-9	0.0996 J	0.0479	0.109		2
06131	Chromium	7440-47-3	22.6	0.131	0.435		2
06132	Cobalt	7440-48-4	7.69	0.0218	0.109		2
06133	Copper	7440-50-8	10.7	0.0871	0.435		2
06135	Lead	7439-92-1	6.46	0.0111	0.218		2
06138	Molybdenum	7439-98-7	0.383	0.0544	0.109		2
06139	Nickel	7440-02-0	14.9	0.109	0.435		2
06141	Selenium	7782-49-2	0.191 J	0.0631	0.435		2
06142	Silver	7440-22-4	0.0387 J	0.0155	0.109		2
06145	Thallium	7440-28-0	0.301	0.0327	0.109		2
06148	Vanadium	7440-62-2	45.1	0.0239	0.109		2
06149	Zinc	7440-66-6	68.3	0.610	3.27		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0078 U	0.0078	0.111		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.3	0.88	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	4.3	0.88	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.6		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.56		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.83	0.0100	0.0100		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437201
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6804 SDG#: DE268-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		EPA 160.3 modified		%	%	%	
11624	Moisture Content by 160.3	n.a.	10.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11291SLG026	11/02/2011 00:58	Matthew S Woods	1
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11290SLF026	10/20/2011 04:44	Holly Berry	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11298SLA026	10/28/2011 11:13	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11291SLG026	10/19/2011 06:50	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	2	11298SLA026	10/25/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11290SLF026	10/18/2011 10:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11293A16A	10/21/2011 05:47	Laura M Krieger	24.08
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201128725853	10/14/2011 16:26	Christopher D Meeks	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201128725853	10/14/2011 16:27	Christopher D Meeks	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	112880015A	10/21/2011 09:37	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910003A	10/19/2011 22:16	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/21/2011 11:31	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910003A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880015A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900028A	10/18/2011 21:45	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112980042A	10/25/2011 23:16	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112920028A	10/21/2011 18:40	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112920027A	10/21/2011 04:27	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112920027A	10/20/2011 12:00	Olivia I Santiago	1
10303	Terphenyls soil prep	SW-846 3550B	1	112920028A	10/20/2011 12:00	Olivia I Santiago	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900028A	10/18/2011 17:00	Elizabeth J Marin	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437201
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6804 SDG#: DE268-04FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112980042A	10/25/2011 18:25	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 20:09	John P Hook	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 10:49	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 10:49	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 03:00	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 07:51	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 07:51	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 07:51	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 07:51	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 09:55	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11298495201A	10/25/2011 18:21	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11298495201A	10/25/2011 18:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201A	10/20/2011 14:27	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11292243201A	10/20/2011 16:52	Elyse P Brunstetter	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437201
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6804 SDG#: DE268-04FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201B	10/21/2011 08:15	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11298495201A	10/25/2011 01:45	James S Mathiot	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201A	10/20/2011 06:30	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201B	10/20/2011 15:35	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402B	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: EB-SA7-SB-101311 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101311

LLI Sample # WW 6437202
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6805 SDG#: DE268-05EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	EPA 1625C		ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	4.61	0.486	0.972		1
N-Nitrosodimethylamine was detected in the method blank at a concentration of 1.33 ng/l. The blank value was not subtracted from the analytical result. Sufficient sample was unavailable to repeat the analysis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11290WAA026	11/01/2011 17:22	Matthew S Woods	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11290WAA026	10/17/2011 13:55	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: TB-101311 Water
SSFL Area IV Collocated Soil Sampling
TB-101311

LLI Sample # WW 6437203
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6807 SDG#: DE268-06TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	EPA 1625C	ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	1.23	0.501	1.00		1
N-Nitrosodimethylamine was detected in the method blank at a concentration of 1.33 ng/l. The blank value was not subtracted from the analytical result. Sufficient sample was unavailable to repeat the analysis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11290WAA026	11/01/2011 17:41	Matthew S Woods	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11290WAA026	10/17/2011 13:55	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: TB-101311 Sand
SSFL Area IV Collocated Soil Sampling
TB-101311

LLI Sample # SW 6437204
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6808 SDG#: DE268-07TB

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	16.6 U	16.6	33.2		1
Wet Chemistry	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	0.50 U	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11291SLG026	11/02/2011 01:17	Matthew S Woods	1
11630	NDMA Soil Microwave	SW-846 3546	1	11291SLG026	10/19/2011 06:50	Katheryne V Sponheimer	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11291162401B	10/18/2011 21:20	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: TB-101311 Water
SSFL Area IV Collocated Soil Sampling
TB-101311

LLI Sample # WW 6437205
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6809 SDG#: DE268-08TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC Volatiles	TPH GRO SW-8015B		ug/l	ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	11290B20A	10/18/2011 00:42	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	11290B20A	10/18/2011 00:42	Marie D John	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB-SA7-SB-101311 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101311

LLI Sample # WW 6437206
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6810 SDG#: DE268-09EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	4.50	0.524	1.05		1
N-Nitrosodimethylamine was detected in the method blank at a concentration of 1.33 ng/l. The blank value was not subtracted from the analytical result. This sample was re-extracted outside of the method required holding time, and N-Nitrosodimethylamine was again detected in the re-analysis of the sample. The data reported here is from the initial extraction of the sample.							
GC/MS Semivolatiles SW-846 8270C			ug/l	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1	U	1	5	1
04678	Benzidine	92-87-5	19	U	19	57	1
04678	Benzoic acid	65-85-0	6	U	6	14	1
04678	Benzyl alcohol	100-51-6	5	U	5	14	1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5	1
04678	2-butoxy-Ethanol	111-76-2	48	U	48	48	1
04678	Carbazole	86-74-8	1	U	1	5	1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5	1
04678	4-Chloroaniline	106-47-8	1	U	1	5	1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5	1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5	1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5	1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5	1
04678	2-Chlorophenol	95-57-8	1	U	1	5	1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5	1
04678	Dibenzofuran	132-64-9	1	U	1	5	1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5	1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5	1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5	1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5	1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5	1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	10	1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	10	1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	14	1
04678	2,4-Dinitrophenol	51-28-5	10	U	10	29	1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5	1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5	1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5	1
04678	Hexachlorobenzene	118-74-1	1	U	1	5	1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5	1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	14	1
04678	Hexachloroethane	67-72-1	1	U	1	5	1
04678	Isophorone	78-59-1	1	U	1	5	1
04678	2-Methylphenol	95-48-7	1	U	1	5	1
04678	4-Methylphenol	106-44-5	2	U	2	5	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1	U	1	5	1
04678	3-Nitroaniline	99-09-2	1	U	1	5	1
04678	4-Nitroaniline	100-01-6	1	U	1	5	1
04678	Nitrobenzene	98-95-3	1	U	1	5	1

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Sample Description: EB-SA7-SB-101311 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101311

LLI Sample # WW 6437206
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6810 SDG#: DE268-09EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	2-Nitrophenol	88-75-5	1 U	1	5		1
04678	4-Nitrophenol	100-02-7	10 U	10	29		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3 U	3	14		1
04678	Phenol	108-95-2	1 U	1	5		1
04678	2-phenoxy-Ethanol	122-99-6	48 U	48	48		1
04678	Tetralin	119-64-2	5 U	5	5		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04678	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1 U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1 U	1	5		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.0098 U	0.0098	0.049		1
10137	Acenaphthylene	208-96-8	0.0098 U	0.0098	0.049		1
10137	Anthracene	120-12-7	0.0098 U	0.0098	0.049		1
10137	Benzo(a)anthracene	56-55-3	0.0098 U	0.0098	0.049		1
10137	Benzo(a)pyrene	50-32-8	0.0098 U	0.0098	0.049		1
10137	Benzo(b)fluoranthene	205-99-2	0.0098 U	0.0098	0.049		1
10137	Benzo(g,h,i)perylene	191-24-2	0.0098 U	0.0098	0.049		1
10137	Benzo(k)fluoranthene	207-08-9	0.0098 U	0.0098	0.049		1
10137	Butylbenzylphthalate	85-68-7	0.049 U	0.049	0.98		1
10137	Di-n-butylphthalate	84-74-2	0.19 J	0.049	0.98		1
10137	Chrysene	218-01-9	0.0098 U	0.0098	0.049		1
10137	Dibenz(a,h)anthracene	53-70-3	0.0098 U	0.0098	0.049		1
10137	Diethylphthalate	84-66-2	0.11 J	0.049	0.98		1
10137	Dimethylphthalate	131-11-3	0.049 U	0.049	0.98		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.049 U	0.049	0.98		1
10137	Fluoranthene	206-44-0	0.0098 U	0.0098	0.049		1
10137	Fluorene	86-73-7	0.0098 U	0.0098	0.049		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.0098 U	0.0098	0.049		1
10137	1-Methylnaphthalene	90-12-0	0.0098 U	0.0098	0.049		1
10137	2-Methylnaphthalene	91-57-6	0.0098 U	0.0098	0.049		1
10137	Naphthalene	91-20-3	0.060	0.029	0.049		1
10137	N-Nitrosodimethylamine	62-75-9	0.0098 U	0.0098	0.049		1
10137	Di-n-octylphthalate	117-84-0	0.049 U	0.049	0.98		1
10137	Phenanthrene	85-01-8	0.029 U	0.029	0.049		1
10137	Pyrene	129-00-0	0.0098 U	0.0098	0.049		1
GC Volatiles	TPH GRO	SW-8015B	ug/l	ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50		1
Explosives	SW-846 8330A		ug/l	ug/l	ug/l	ug/l	

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

Sample Description: EB-SA7-SB-101311 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101311

LLI Sample # WW 6437206
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6810 SDG#: DE268-09EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/l		ug/l	ug/l	ug/l	
10131	4-Amino-2,6-Dinitrotoluene	19406-51-0	0.30	U	0.30	0.60	1000000 0	1
10131	2-Amino-4,6-Dinitrotoluene	35572-78-2	0.20	U	0.20	0.60	1000000 0	1
10131	2,6-Diamino-4-nitrotoluene	59229-75-3	0.20	U	0.20	0.60	1000000 0	1
10131	2,4-Diamino-6-nitrotoluene	6629-29-4	0.20	U	0.20	0.60	1000000 0	1
10131	1,3-Dinitrobenzene	99-65-0	0.20	U	0.20	0.60	1000000 0	1
10131	2,4-Dinitrotoluene	121-14-2	0.20	U	0.20	0.60	1000000 0	1
10131	2,6-Dinitrotoluene	606-20-2	0.20	U	0.20	0.60	1000000 0	1
10131	HMX	2691-41-0	0.65	U	0.65	2.0	1000000 0	1
10131	Nitrobenzene	98-95-3	0.20	U	0.20	0.60	1000000 0	1
10131	Nitroglycerin	55-63-0	5.2	U	5.2	15	1000000 0	1
10131	2-Nitrotoluene	88-72-2	0.20	U	0.20	0.60	1000000 0	1
10131	3-Nitrotoluene	99-08-1	0.40	U	0.40	1.2	1000000 0	1
10131	4-Nitrotoluene	99-99-0	0.60	U	0.60	1.2	1000000 0	1
10131	PETN	78-11-5	6.0	U	6.0	18	1000000 0	1
10131	RDX	121-82-4	1.7		0.20	0.60	1000000 0	1
10131	Tetryl	479-45-8	0.40	U	0.40	0.60	1000000 0	1
10131	1,3,5-Trinitrobenzene	99-35-4	0.20	U	0.20	0.60	1000000 0	1
10131	2,4,6-Trinitrotoluene	118-96-7	0.20	U	0.20	0.60	1000000 0	1
HPLC Organics		SW-846 8315A	ug/l		ug/l	ug/l	ug/l	
04144	20b Formaldehyde 8315A	50-00-0	10	U	10	50		1
Pesticides/PCBs		SW-846 8082	ug/l		ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.50		1
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.50		1
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.50		1
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.50		1
10227	PCB-1221	11104-28-2	0.10	U	0.10	0.50		1
10227	PCB-1232	11141-16-5	0.20	U	0.20	0.50		1
10227	PCB-1242	53469-21-9	0.10	U	0.10	0.50		1
10227	PCB-1248	12672-29-6	0.10	U	0.10	0.50		1

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Sample Description: EB-SA7-SB-101311 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101311

LLI Sample # WW 6437206
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6810 SDG#: DE268-09EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/l		ug/l	ug/l	ug/l	
10227	PCB-1254	11097-69-1	0.10	U	0.10	0.50		1
10227	PCB-1260	11096-82-5	0.15	U	0.15	0.50		1
10227	PCB-1262	37324-23-5	0.20	U	0.20	0.50		1
10227	PCB-1268	11100-14-4	0.16	U	0.16	0.50		1
GC Miscellaneous		SW-846 8015B	ug/l		ug/l	ug/l	ug/l	
06624	Ethanol	64-17-5	200	U	200	1,000		1
06624	Isopropanol	67-63-0	200	U	200	1,000		1
06624	Methanol	67-56-1	200	U	200	1,000		1
GC Miscellaneous		SW-846 8015B modified	mg/l		mg/l	mg/l	mg/l	
08278	Diethylene glycol	111-46-6	20	U	20	200		1
08278	Ethylene glycol	107-21-1	20	U	20	200		1
08278	Propylene glycol	57-55-6	20	U	20	200		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/l		mg/l	mg/l	mg/l	
10319	m-Terphenyl	92-06-8	0.081	U	0.081	0.25		1
10319	o-Terphenyl	84-15-1	0.081	U	0.081	0.25		1
10319	p-Terphenyl	92-94-4	0.081	U	0.081	0.25		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/l		mg/l	mg/l	mg/l	
10365	EFH (C12-C14)	n.a.	0.10	U	0.10	0.61		1
10365	EFH (C15-C20)	n.a.	0.10	U	0.10	0.61		1
10365	EFH (C21-C30)	n.a.	0.10	U	0.10	0.61		1
10365	EFH (C30 - C40)	n.a.	0.10	U	0.10	0.61		1
10365	EFH (C8-C11)	n.a.	0.10	U	0.10	0.61		1
Metals		SW-846 6010B	mg/l		mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0801	U	0.0801	0.200		1
08014	Boron	7440-42-8	0.0068	J	0.0022	0.0500		1
01750	Calcium	7440-70-2	0.0705	U	0.0705	0.200		1
01754	Iron	7439-89-6	0.0141	U	0.0141	0.200		1
01756	Lithium	7439-93-2	0.0076	U	0.0076	0.0200		1
01757	Magnesium	7439-95-4	0.0067	U	0.0067	0.100		1
07058	Manganese	7439-96-5	0.00044	U	0.00044	0.0050		1
10143	Phosphorus	7723-14-0	0.0047	U	0.0047	0.100		1
01762	Potassium	7440-09-7	0.0874	U	0.0874	0.500		1
01767	Sodium	7440-23-5	0.0647	U	0.0647	1.00		1
08068	Strontium	7440-24-6	0.00051	J	0.00022	0.0050		1
07069	Tin	7440-31-5	0.0043	U	0.0043	0.0200		1
07070	Titanium	7440-32-6	0.00046	U	0.00046	0.0100		1
10144	Zirconium	7440-67-7	0.0042	U	0.0042	0.0500		1
		SW-846 6020	mg/l		mg/l	mg/l	mg/l	

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Sample Description: EB-SA7-SB-101311 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101311

LLI Sample # WW 6437206
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6810 SDG#: DE268-09EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00042 U	0.00042	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00069 U	0.00069	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000089 J	0.000080	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00027 U	0.00027	0.0020		1
06042	Silver	7440-22-4	0.000098 U	0.000098	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00018 U	0.00018	0.00050		1
06049	Zinc	7440-66-6	0.0056 J	0.0040	0.0150		1
		SW-846 7470A	mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000026 U	0.000026	0.00020		1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
00368	11b Anions by 300.0 - Nitrate	14797-55-8	0.050 U	0.050	0.10		1
		EPA 314.0	ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
		SW-846 7199	ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1
		SW-846 9012B	mg/l	mg/l	mg/l	mg/l	
08255	16b Cyanide by 9012B	57-12-5	0.0050 U	0.0050	0.010		1
		SW-846 9040B	Std. Units	Std. Units	Std. Units	Std. Units	
00200	17b pH by 9040B	n.a.	5.5	0.010	0.010		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Sample Description: EB-SA7-SB-101311 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101311

LLI Sample # WW 6437206
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6810 SDG#: DE268-09EB*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11290WAA026	11/01/2011 18:00	Matthew S Woods	1
04678	5b Semivolatiles by 8270C	SW-846 8270C	1	11290WAB026	10/18/2011 08:08	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11290WAJ026	10/21/2011 12:26	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	11290WAB026	10/17/2011 17:30	Nicholas W Shroyer	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	11290WAJ026	10/18/2011 12:00	Olivia I Santiago	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11290WAA026	10/17/2011 13:55	Wanda F Oswald	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	11290B20A	10/18/2011 01:04	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	11290B20A	10/18/2011 01:04	Marie D John	1
10131	15b Energetics by 8330A	SW-846 8330A	1	112900016A	10/20/2011 08:09	James H Place	1
04144	20b Formaldehyde 8315A	SW-846 8315A	1	112880004A	10/17/2011 14:57	James H Place	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	112900011A	10/20/2011 15:10	Jessica L Miller	1
11117	PCB Waters Extraction	SW-846 3510C	1	112900011A	10/18/2011 02:30	Sherry L Morrow	1
01013	Formaldehyde Extraction	SW-846 8315A	1	112880004A	10/16/2011 08:30	Olivia Arosemena	1
11122	Energetics Extraction	SW-846 8330	1	112900016A	10/18/2011 16:45	Kelli M Barto	1
06624	18b Alcohols by 8015B	SW-846 8015B	1	112870020A	10/14/2011 21:07	Elizabeth J Marin	1
08278	19b Glycols by 8015B	SW-846 8015B modified	1	112910030A	10/18/2011 21:45	Tyler O Griffin	1
10319	22b Terphenyls by 8015B	SW-846 8015B	1	112880013A	10/21/2011 13:30	Robert Brown	1
10365	9b TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112900022A	10/20/2011 19:15	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	112900022A	10/18/2011 08:45	Catherine R Wiker	1
10304	Terphenyls water prep	SW-846 3510C	1	112880013A	10/17/2011 10:00	Catherine R Wiker	1
01743	Aluminum	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
08014	Boron	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
01754	Iron	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
01756	Lithium	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
07058	Manganese	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
10143	Phosphorus	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
01762	Potassium	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
01767	Sodium	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
08068	Strontium	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
07069	Tin	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
07070	Titanium	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
10144	Zirconium	SW-846 6010B	1	112901848006	10/21/2011 07:57	Tara L Snyder	1
06024	Antimony	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06026	Barium	SW-846 6020	1	112906050003D	10/20/2011 04:35	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06033	Copper	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06035	Lead	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	112906050003C	10/20/2011 04:35	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB-SA7-SB-101311 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101311

LLI Sample # WW 6437206
LLI Group # 1271284
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6810 SDG#: DE268-09EB*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06041	Selenium	SW-846 6020	1	112906050003B	10/20/2011 04:35	Choon Y Tian	1
06042	Silver	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	112906050003A	10/20/2011 04:35	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	112915713004	10/19/2011 09:12	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	112901848006	10/18/2011 12:00	James L Mertz	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	112906050003	10/18/2011 12:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	112915713004	10/18/2011 14:32	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	11287196902B	10/14/2011 22:24	Ashley M Adams	1
00368	11b Anions by 300.0 - Nitrate	EPA 300.0	1	11287196902B	10/14/2011 22:24	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	2	11288281101A	10/18/2011 16:56	Elyse P Brunstetter	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	11287281401A	10/14/2011 11:59	Elyse P Brunstetter	1
08255	16b Cyanide by 9012B	SW-846 9012B	1	11294117101B	10/23/2011 11:06	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012B	1	11294117101B	10/21/2011 15:55	Carolyn M Mastropietro	1
00200	17b pH by 9040B	SW-846 9040B	1	11287020001A	10/14/2011 21:00	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11290SLF026	Sample number(s): 6437193-6437197, 6437201								
Acenaphthene	17	U	17.	170	ug/kg	95	76-111		
Acenaphthylene	17	U	17.	170	ug/kg	102	75-122		
Aniline	170		170.	500	ug/kg	84	20-115		
	U								
Anthracene	17	U	17.	170	ug/kg	98	76-112		
Benzidine	1,200		1,200.	3,300	ug/kg	49	15-121		
	U								
Benzo(a)anthracene	17	U	17.	170	ug/kg	103	73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	102	65-124		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	103	61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	98	60-125		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	98	67-125		
Benzoic acid	170		170.	500	ug/kg	93	62-113		
	U								
Benzyl alcohol	170		170.	500	ug/kg	100	68-111		
	U								
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	103	73-114		
Butylbenzylphthalate	17	U	17.	170	ug/kg	95	75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	96	79-112		
Carbazole	17	U	17.	170	ug/kg	94	77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	106	74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	57	10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	105	70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	101	70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	100	62-115		
2-Chloronaphthalene	17	U	17.	170	ug/kg	74	49-128		
2-Chlorophenol	17	U	17.	170	ug/kg	101	72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	100	74-115		
Chrysene	17	U	17.	170	ug/kg	98	76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	105	61-126		
Dibenzofuran	17	U	17.	170	ug/kg	95	74-116		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	86	74-99		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	86	70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	87	74-106		
3,3'-Dichlorobenzidine	100		100.	330	ug/kg	56	10-116		
	U								
2,4-Dichlorophenol	17	U	17.	170	ug/kg	104	75-111		
Diethylphthalate	17	U	17.	170	ug/kg	96	76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	106	72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	116	83-120		
Dimethylphthalate	17	U	17.	170	ug/kg	98	77-109		
4,6-Dinitro-2-methylphenol	170		170.	500	ug/kg	83	46-120		
	U								
2,4-Dinitrophenol	330		330.	1,000	ug/kg	63	18-133		
	U								

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
2,4-Dinitrotoluene	33 U	33.	170	ug/kg	104		73-115		
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	103		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	106		71-125		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	99		75-117		
Fluoranthene	17 U	17.	170	ug/kg	101		78-116		
Fluorene	17 U	17.	170	ug/kg	98		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	102		73-119		
Hexachlorobutadiene	67 U	67.	170	ug/kg	98		65-117		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	102		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	89		61-109		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	103		64-119		
Isophorone	17 U	17.	170	ug/kg	108		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	94		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	96		69-109		
2-Methylphenol	33 U	33.	170	ug/kg	103		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	102		66-117		
Naphthalene	17 U	17.	170	ug/kg	95		73-106		
2-Nitroaniline	17 U	17.	170	ug/kg	102		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	96		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	73		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	107		66-119		
2-Nitrophenol	17 U	17.	170	ug/kg	103		76-111		
4-Nitrophenol	170 U	170.	500	ug/kg	87		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	98		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	97		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	99		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	102		62-137		
Pentachlorophenol	170 U	170.	500	ug/kg	95		51-117		
Phenanthrene	17 U	17.	170	ug/kg	94		77-113		
Phenol	17 U	17.	170	ug/kg	106		58-112		
Pyrene	17 U	17.	170	ug/kg	96		75-115		
Tetralin	170 U	170.	170	ug/kg					
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	96		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	104		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	105		78-111		
Batch number: 11290WAA026	Sample number(s): 6437202-6437203, 6437206								
N-Nitrosodimethylamine	1.33	0.500	1.00	ng/l	101	107	70-130	6	30
Batch number: 11290WAB026	Sample number(s): 6437206								
Aniline	1 U	1.	5	ug/l	77	83	38-116	8	30
Benzidine	20 U	20.	60	ug/l	62	62	34-117	0	30
Benzoic acid	6 U	6.	15	ug/l	24	21	10-69	11	30
Benzyl alcohol	5 U	5.	15	ug/l	79	91	66-97	14	30
4-Bromophenyl-phenylether	1 U	1.	5	ug/l	101	103	75-115	2	30
2-butoxy-Ethanol	50 U	50.	50	ug/l					
Carbazole	1 U	1.	5	ug/l	99	103	75-120	4	30
4-Chloro-3-methylphenol	1 U	1.	5	ug/l	103	109	70-123	6	30
4-Chloroaniline	1 U	1.	5	ug/l	67	70	24-128	5	30
bis(2-Chloroethoxy)methane	1 U	1.	5	ug/l	104	109	74-124	5	30
bis(2-Chloroethyl)ether	1 U	1.	5	ug/l	101	108	77-108	7	30
bis(2-Chloroisopropyl)ether	1 U	1.	5	ug/l	98	106	62-127	8	30
2-Chloronaphthalene	2 U	2.	5	ug/l	73	81	54-132	11	30
2-Chlorophenol	1 U	1.	5	ug/l	94	100	71-114	7	30

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
4-Chlorophenyl-phenylether	2 U	2.	5	ug/l	101	106	77-114	5	30
Dibenzofuran	1 U	1.	5	ug/l	96	101	75-117	4	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	87	97	55-118	10	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	88	97	61-111	9	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	88	96	53-119	9	30
3,3'-Dichlorobenzidine	2 U	2.	5	ug/l	70	72	37-117	2	30
2,4-Dichlorophenol	1 U	1.	5	ug/l	102	109	77-117	7	30
2,4-Dimethylphenol	3 U	3.	10	ug/l	102	107	72-110	4	30
3,5-Dimethylphenol	3 U	3.	10	ug/l	108	113	70-130	5	30
4,6-Dinitro-2-methylphenol	5 U	5.	15	ug/l	98	102	65-126	4	30
2,4-Dinitrophenol	10 U	10.	30	ug/l	93	99	52-131	6	30
2,4-Dinitrotoluene	1 U	1.	5	ug/l	108	113	76-119	5	30
2,6-Dinitrotoluene	1 U	1.	5	ug/l	104	111	76-118	6	30
1,2-Diphenylhydrazine	1 U	1.	5	ug/l	100	103	68-127	4	30
Hexachlorobenzene	1 U	1.	5	ug/l	105	107	75-119	2	30
Hexachlorobutadiene	1 U	1.	5	ug/l	96	104	57-124	8	30
Hexachlorocyclopentadiene	5 U	5.	15	ug/l	84	90	36-118	6	30
Hexachloroethane	1 U	1.	5	ug/l	86	95	52-113	10	30
Isophorone	1 U	1.	5	ug/l	107	113	74-117	6	30
2-Methylphenol	1 U	1.	5	ug/l	86	94	58-110	9	30
4-Methylphenol	2 U	2.	5	ug/l	77	85	49-108	10	30
2-Nitroaniline	1 U	1.	5	ug/l	104	111	75-120	7	30
3-Nitroaniline	1 U	1.	5	ug/l	99	104	74-113	5	30
4-Nitroaniline	1 U	1.	5	ug/l	84	89	59-100	5	30
Nitrobenzene	1 U	1.	5	ug/l	108	114*	75-109	5	30
2-Nitrophenol	1 U	1.	5	ug/l	106	111	76-118	4	30
4-Nitrophenol	10 U	10.	30	ug/l	40	46	16-78	14	30
N-Nitroso-di-n-propylamine	1 U	1.	5	ug/l	100	108	69-110	8	30
N-Nitrosodiphenylamine	2 U	2.	5	ug/l	94	97	67-136	3	30
Pentachlorophenol	3 U	3.	15	ug/l	107	112*	53-110	5	30
Phenol	1 U	1.	5	ug/l	38	49	21-67	25	30
2-phenoxy-Ethanol	50 U	50.	50	ug/l					
Tetralin	5 U	5.	5	ug/l					
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	96	103	71-112	7	30
2,4,5-Trichlorophenol	1 U	1.	5	ug/l	103	109*	79-107	6	30
2,4,6-Trichlorophenol	1 U	1.	5	ug/l	103	110	76-120	7	30
Batch number: 11290WAJ026 Sample number(s): 6437206									
Acenaphthene	0.010 U	0.010	0.050	ug/l	98	97	74-109	2	30
Acenaphthylene	0.010 U	0.010	0.050	ug/l	97	95	70-110	2	30
Anthracene	0.010 U	0.010	0.050	ug/l	99	100	66-111	1	30
Benzo(a)anthracene	0.010 U	0.010	0.050	ug/l	101	102	72-114	0	30
Benzo(a)pyrene	0.010 U	0.010	0.050	ug/l	95	95	60-127	0	30
Benzo(b)fluoranthene	0.010 U	0.010	0.050	ug/l	98	99	58-151	1	30
Benzo(g,h,i)perylene	0.010 U	0.010	0.050	ug/l	108	108	57-131	0	30
Benzo(k)fluoranthene	0.010 U	0.010	0.050	ug/l	99	99	59-130	0	30
Butylbenzylphthalate	0.050 U	0.050	1.0	ug/l	77	78	40-138	1	30
Di-n-butylphthalate	0.050 U	0.050	1.0	ug/l	84	85	56-148	1	30
Chrysene	0.010 U	0.010	0.050	ug/l	105	105	76-116	0	30
Dibenz(a,h)anthracene	0.010 U	0.010	0.050	ug/l	109	110	55-134	0	30
Diethylphthalate	0.050 U	0.050	1.0	ug/l	91	92	37-148	1	30
Dimethylphthalate	0.050 U	0.050	1.0	ug/l	86	86	40-119	0	30
Bis(2-Ethylhexyl)phthalate	0.050 U	0.050	1.0	ug/l	102	102	57-154	0	30
Fluoranthene	0.010 U	0.010	0.050	ug/l	104	106	75-116	2	30
Fluorene	0.010 U	0.010	0.050	ug/l	105	103	75-114	2	30
Indeno(1,2,3-cd)pyrene	0.010 U	0.010	0.050	ug/l	108	108	53-158	0	30
1-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	93	94	71-117	0	30
2-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	92	92	75-115	0	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.030 U	0.030	0.050	ug/l	95	95	72-109	0	30
N-Nitrosodimethylamine	0.010 U	0.010	0.050	ug/l	70	65	36-89	8	30
Di-n-octylphthalate	0.050 U	0.050	1.0	ug/l	87	87	57-145	1	30
Phenanthrene	0.030 U	0.030	0.050	ug/l	98	99	76-111	1	30
Pyrene	0.010 U	0.010	0.050	ug/l	92	91	69-118	0	30

Batch number: 11291SLG026 Sample number(s): 6437193-6437197, 6437201, 6437204
N-Nitrosodimethylamine 16.7 U 16.7 33.3 ng/kg 105

70-130

Batch number: 11298SLA026	Sample number(s): 6437193-6437197, 6437201								
Acenaphthene	0.67 U	0.67	1.7	ug/kg	102		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	94		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	100		73-113		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	99		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	98		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	104		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	100		66-150		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	103		54-142		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	110		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	124		75-137		
Chrysene	0.33 U	0.33	1.7	ug/kg	101		73-114		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	104		53-138		
Diethylphthalate	6.0 U	6.0	18	ug/kg	110		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	105		79-121		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	129		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	102		64-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	103		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	102		56-134		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	93		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	91		62-120		
Naphthalene	0.67 U	0.67	1.7	ug/kg	95		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	94		55-118		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	110		68-162		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	96		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	99		72-119		

Batch number: 11290B20A Sample number(s): 6437205-6437206
TPH-GRO S.CA water C5-C12 20 U 20. 50 ug/l 100 91 75-135 10 30

Batch number: 11293A16A Sample number(s): 6437193-6437197, 6437201
9a TPH by EPA 8015B Gas C5-C12 0.2 U 0.2 1.0 mg/kg 76 67-119

Batch number: 112880015A	Sample number(s): 6437193-6437197, 6437199-6437201								
4-Amino-2,6-Dinitrotoluene	60 U	60.	120	ug/kg	109		80-120		
2-Amino-4,6-Dinitrotoluene	40 U	40.	120	ug/kg	106		80-120		
2,6-Diamino-4-nitrotoluene	80 U	80.	240	ug/kg	87	90	54-134	4	30
2,4-Diamino-6-nitrotoluene	80 U	80.	240	ug/kg	86	90	54-134	4	30
1,3-Dinitrobenzene	40 U	40.	120	ug/kg	110		51-171		
2,4-Dinitrotoluene	40 U	40.	120	ug/kg	101		72-135		
2,6-Dinitrotoluene	40 U	40.	120	ug/kg	106		80-120		
HMX	100 U	100.	300	ug/kg	93		74-130		
Nitrobenzene	40 U	40.	120	ug/kg	106		80-120		
Nitroglycerin	800 U	800.	2,400	ug/kg	90		80-120		
2-Nitrotoluene	80 U	80.	120	ug/kg	101		78-128		
3-Nitrotoluene	100 U	100.	120	ug/kg	108		73-127		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Nitrotoluene	80 U	80.	120	ug/kg	101		80-120		
PETN	800 U	800.	2,400	ug/kg	104		80-120		
RDX	50 U	50.	120	ug/kg	102		75-131		
Tetryl	61 U	61.	120	ug/kg	96		70-168		
1,3,5-Trinitrobenzene	40 U	40.	120	ug/kg	104		77-137		
2,4,6-Trinitrotoluene	40 U	40.	120	ug/kg	108		80-120		
Batch number: 112900016A Sample number(s): 6437206									
4-Amino-2,6-Dinitrotoluene	0.30 U	0.30	0.60	ug/l	99	93	80-120	6	30
2-Amino-4,6-Dinitrotoluene	0.20 U	0.20	0.60	ug/l	94	88	80-120	7	30
2,6-Diamino-4-nitrotoluene	0.20 U	0.20	0.60	ug/l	80	83	50-122	4	30
2,4-Diamino-6-nitrotoluene	0.20 U	0.20	0.60	ug/l	80	83	50-122	4	30
1,3-Dinitrobenzene	0.20 U	0.20	0.60	ug/l	100	96	72-117	4	30
2,4-Dinitrotoluene	0.20 U	0.20	0.60	ug/l	93	89	80-120	4	30
2,6-Dinitrotoluene	0.20 U	0.20	0.60	ug/l	100	97	80-120	3	30
HMX	0.65 U	0.65	2.0	ug/l	87	82	65-125	6	30
Nitrobenzene	0.20 U	0.20	0.60	ug/l	92	88	75-121	4	30
Nitroglycerin	5.2 U	5.2	15	ug/l	92	88	80-120	5	30
2-Nitrotoluene	0.20 U	0.20	0.60	ug/l	93	88	74-120	6	30
3-Nitrotoluene	0.40 U	0.40	1.2	ug/l	98	94	69-107	4	30
4-Nitrotoluene	0.60 U	0.60	1.2	ug/l	93	88	80-120	6	30
PETN	6.0 U	6.0	18	ug/l	96	96	80-120	0	30
RDX	0.20 U	0.20	0.60	ug/l	88	82	70-125	7	30
Tetryl	0.40 U	0.40	0.60	ug/l	92	86	31-148	7	30
1,3,5-Trinitrobenzene	0.20 U	0.20	0.60	ug/l	88	82	53-129	7	30
2,4,6-Trinitrotoluene	0.20 U	0.20	0.60	ug/l	98	93	76-109	5	30
Batch number: 112880004A Sample number(s): 6437206									
20b Formaldehyde 8315A	10 U	10.	50	ug/l	96	104	69-130	8	30
Batch number: 112910003A Sample number(s): 6437193-6437197, 6437199-6437201									
20a Formaldehyde 8315A	600 U	600.	1,500	ug/kg	91		80-126		
Batch number: 112900011A Sample number(s): 6437206									
Aroclor 5432	0.10 U	0.10	0.50	ug/l					
Aroclor 5442	0.10 U	0.10	0.50	ug/l	76	74	35-84	3	30
Aroclor 5460	0.10 U	0.10	0.50	ug/l					
PCB-1016	0.10 U	0.10	0.50	ug/l	84	90	51-128	7	30
PCB-1221	0.10 U	0.10	0.50	ug/l					
PCB-1232	0.20 U	0.20	0.50	ug/l					
PCB-1242	0.10 U	0.10	0.50	ug/l					
PCB-1248	0.10 U	0.10	0.50	ug/l					
PCB-1254	0.10 U	0.10	0.50	ug/l					
PCB-1260	0.15 U	0.15	0.50	ug/l	94	102	56-135	8	30
PCB-1262	0.20 U	0.20	0.50	ug/l					
PCB-1268	0.16 U	0.16	0.50	ug/l					
Batch number: 112910025A Sample number(s): 6437193-6437197, 6437199-6437201									
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	69	66	36-106	4	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	67*		72-120		
PCB-1221	0.33 U	0.33	1.7	ug/kg					
PCB-1232	0.33 U	0.33	1.7	ug/kg					
PCB-1242	0.33 U	0.33	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.39 U	0.39	1.7	ug/kg	85		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 112870020A	Sample number(s): 6437206								
Ethanol	200 U	200.	1,000	ug/l	96		78-116		
Isopropanol	200 U	200.	1,000	ug/l	96		75-125		
Methanol	200 U	200.	1,000	ug/l	96		76-122		
Batch number: 112900028A	Sample number(s): 6437193-6437197, 6437199-6437201								
Ethanol	100 U	100.	500	ug/kg	89		71-129		
Isopropanol	100 U	100.	500	ug/kg	86		75-125		
Methanol	100 U	100.	500	ug/kg	90		68-129		
Batch number: 112910030A	Sample number(s): 6437206								
Diethylene glycol	20 U	20.	200	mg/l	120		67-126		
Ethylene glycol	20 U	20.	200	mg/l	137*		78-136		
Propylene glycol	20 U	20.	200	mg/l	140*		65-132		
Batch number: 112980042A	Sample number(s): 6437193-6437197, 6437201								
Diethylene glycol	5.0 U	5.0	10	mg/kg	100		75-125		
Ethylene glycol	5.0 U	5.0	10	mg/kg	106		53-149		
Propylene glycol	5.0 U	5.0	10	mg/kg	99		67-131		
Batch number: 112880013A	Sample number(s): 6437206								
m-Terphenyl	0.080 U	0.080	0.25	mg/l	98	102	61-108	4	20
o-Terphenyl	0.080 U	0.080	0.25	mg/l	102	104	75-125	2	20
p-Terphenyl	0.080 U	0.080	0.25	mg/l	98	102	63-110	4	20
Batch number: 112900022A	Sample number(s): 6437206								
EFH (C12-C14)	0.10 U	0.10	0.60	mg/l	88	86	63-121	2	30
EFH (C15-C20)	0.10 U	0.10	0.60	mg/l	93	95	72-124	1	30
EFH (C21-C30)	0.10 U	0.10	0.60	mg/l	92	73	64-123	23	30
EFH (C30 - C40)	0.10 U	0.10	0.60	mg/l	73	80	73-124	9	30
EFH (C8-C11)	0.10 U	0.10	0.60	mg/l	76	74	43-107	3	30
Batch number: 112920027A	Sample number(s): 6437193-6437197, 6437199-6437201								
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	94		70-123		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	96		75-128		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	97		64-134		
EFH (C30 - C40)	0.40 U	0.40	1.2	mg/kg	85		65-128		
EFH (C8-C11)	0.40 U	0.40	1.2	mg/kg	83		49-107		
Batch number: 112920028A	Sample number(s): 6437193-6437197, 6437199-6437201								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	100		64-111		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	105		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	98		69-109		
Batch number: 112901026001A	Sample number(s): 6437193-6437198, 6437201								
Antimony	0.0740 U	0.0740	0.200	mg/kg	134		40-227		
Arsenic	0.0800 U	0.0800	0.400	mg/kg	101		83-111		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Beryllium	0.0160 U	0.0160	0.100	mg/kg	102		84-112		
Cadmium	0.0440 U	0.0440	0.100	mg/kg	105		83-111		
Chromium	0.120 U	0.120	0.400	mg/kg	111		77-123		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	108		85-114		
Copper	0.0800 U	0.0800	0.400	mg/kg	104		81-110		
Lead	0.0102 U	0.0102	0.200	mg/kg	104		84-112		
Nickel	0.100 U	0.100	0.400	mg/kg	104		81-110		
Silver	0.0142 U	0.0142	0.100	mg/kg	102		83-112		
Thallium	0.0300 U	0.0300	0.100	mg/kg	103		82-112		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	103		76-110		
Zinc	0.560 U	0.560	3.00	mg/kg	101		82-110		
Batch number: 112901026001B	Sample number(s): 6437193-6437198, 6437201								
Selenium	0.0580 U	0.0580	0.400	mg/kg	102		79-110		
Batch number: 112901026001C	Sample number(s): 6437193-6437198, 6437201								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	105		80-110		
Batch number: 112901026001D	Sample number(s): 6437193-6437198, 6437201								
Barium	0.106 U	0.106	0.400	mg/kg	102		83-110		
Batch number: 112901848006	Sample number(s): 6437206								
Aluminum	0.0801 U	0.0801	0.200	mg/l	102	102	90-112	0	20
Boron	0.0046 J	0.0022	0.0500	mg/l	92	96	89-110	4	20
Calcium	0.0705 U	0.0705	0.200	mg/l	101	100	90-110	1	20
Iron	0.0141 U	0.0141	0.200	mg/l	102	101	90-112	1	20
Lithium	0.0076 U	0.0076	0.0200	mg/l	96	97	90-110	2	20
Magnesium	0.0067 U	0.0067	0.100	mg/l	100	98	90-110	1	20
Manganese	0.00044 U	0.00044	0.0050	mg/l	102	101	90-110	1	20
Phosphorus	0.0047 U	0.0047	0.100	mg/l	101	100	90-110	1	20
Potassium	0.0874 U	0.0874	0.500	mg/l	96	93	85-115	3	20
Sodium	0.0647 U	0.0647	1.00	mg/l	96	95	87-114	0	20
Strontium	0.00022 U	0.00022	0.0050	mg/l	99	99	90-110	0	20
Tin	0.0043 U	0.0043	0.0200	mg/l	102	102	90-110	0	20
Titanium	0.00046 U	0.00046	0.0100	mg/l	102	102	90-113	0	20
Zirconium	0.0093 J	0.0042	0.0500	mg/l	101	103	90-110	3	20
Batch number: 112905708002	Sample number(s): 6437193-6437198, 6437201								
Aluminum	6.05 U	6.05	20.0	mg/kg	99		40-127		
Boron	0.360 U	0.360	5.00	mg/kg	103		83-110		
Calcium	6.41 J	2.50	20.0	mg/kg	106		81-110		
Iron	2.61 U	2.61	20.0	mg/kg	101		47-129		
Lithium	0.62 U	0.62	2.0	mg/kg	102		80-120		
Magnesium	0.440 U	0.440	10.0	mg/kg	102		63-116		
Manganese	0.0360 U	0.0360	0.500	mg/kg	104		85-116		
Phosphorus	1.73 J	0.350	10.0	mg/kg	107		80-120		
Strontium	0.0510 J	0.0250	0.500	mg/kg	107		84-110		
Tin	1.44 J	0.320	10.0	mg/kg	104		86-120		
Titanium	0.0710 U	0.0710	1.00	mg/kg	93		80-120		
Zirconium	0.460 U	0.460	5.00	mg/kg	104		80-120		
Batch number: 112905711002	Sample number(s): 6437193-6437198, 6437201								
Mercury	0.0070 U	0.0070	0.100	mg/kg	105		83-119		
Batch number: 112906050003A	Sample number(s): 6437206								
Antimony	0.00042 U	0.00042	0.0010	mg/l	110	106	87-110	4	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	108	101	86-111	7	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	103	102	90-113	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCS D Limits	RPD	RPD Max
Cadmium	0.00020 U	0.00020	0.00050	mg/l	109	102	90-114	7	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	99	102	90-118	2	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	101	102	87-113	1	20
Copper	0.00038 U	0.00038	0.0020	mg/l	102	103	90-113	1	20
Lead	0.000080 U	0.00008	0.0010	mg/l	100	101	90-115	1	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	99	104	90-113	5	20
Silver	0.000098 U	0.00009	0.00050	mg/l	101	102	90-115	2	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	94	98	89-116	4	20
Vanadium	0.00018 U	0.00018	0.00050	mg/l	99	99	89-116	0	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	102	101	90-116	1	20
Batch number: 112906050003B	Sample number(s): 6437206								
Selenium	0.00027 U	0.00027	0.0020	mg/l	107	102	85-114	4	20
Batch number: 112906050003C	Sample number(s): 6437206								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	98	99	89-115	1	20
Batch number: 112906050003D	Sample number(s): 6437206								
Barium	0.00069 U	0.00069	0.0020	mg/l	99	98	88-113	1	20
Batch number: 112915713004	Sample number(s): 6437206								
Mercury	0.000026 U	0.00002	0.00020	mg/l	101	104	80-120	3	20
Batch number: 112985708002	Sample number(s): 6437193-6437198, 6437201								
Potassium	11.3 U	11.3	50.0	mg/kg	100		71-110		
Sodium	5.95 U	5.95	100	mg/kg	101		76-110		
Batch number: 11287196902B	Sample number(s): 6437206								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	96	96	90-110	0	20
11b Anions by 300.0 - Nitrate	0.050 U	0.050	0.10	mg/l	98	97	90-110	1	20
Batch number: 11287281401A	Sample number(s): 6437206								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	109	101	90-110	7	20
Batch number: 11288281101A	Sample number(s): 6437206								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	98	103	85-115	5	20
Batch number: 11291243201A	Sample number(s): 6437193-6437194								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	81		80-120		
Batch number: 11292243201A	Sample number(s): 6437195-6437196, 6437198, 6437201								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	81		80-120		
Batch number: 11293102201A	Sample number(s): 6437193-6437194								
16a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	85		80-120		
Batch number: 11293102201B	Sample number(s): 6437195-6437196, 6437198, 6437201								
16a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	85		80-120		
Batch number: 11293621201A	Sample number(s): 6437193-6437196, 6437198, 6437201								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	108		85-115		
Batch number: 11294117101B	Sample number(s): 6437206								
16b Cyanide by 9012B	0.0050 U	0.0050	0.010	mg/l	91	90	90-110	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11298495201A	Sample number(s): 6437193-6437196, 6437198, 6437201								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	101		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	102		90-110		
Batch number: 11287020001A	Sample number(s): 6437206								
17b pH by 9040B					100	100	90-110	0	3
Batch number: 11299039402B	Sample number(s): 6437193-6437195, 6437198, 6437201								
17a pH by 9045C					100		95-105		
Batch number: 11291162401B	Sample number(s): 6437204								
Moisture Content by 160.3					100		80-120		
Batch number: 11298162401B	Sample number(s): 6437193-6437199, 6437201								
28a Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11290SLF026	Sample number(s): 6437193-6437197, 6437201 UNSPK: 6437195								
Acenaphthene	101	103	75-115	2	30				
Acenaphthylene	107	110	81-110	2	30				
Aniline	88	84	18-116	4	30				
Anthracene	101	103	75-115	1	30				
Benzidine	47	41	35-141	15	30				
Benzo(a)anthracene	99	100	65-122	1	30				
Benzo(a)pyrene	104	105	57-126	1	30				
Benzo(b)fluoranthene	112	111	59-125	1	30				
Benzo(g,h,i)perylene	106	105	59-127	1	30				
Benzo(k)fluoranthene	94	95	56-132	1	30				
Benzoic acid	64	39	10-173	49*	30				
Benzyl alcohol	104	105	67-115	1	30				
4-Bromophenyl-phenylether	106	110	67-129	3	30				
Butylbenzylphthalate	100	100	73-134	0	30				
Di-n-butylphthalate	98	99	67-123	1	30				
Carbazole	97	98	64-120	1	30				
4-Chloro-3-methylphenol	107	103	62-122	4	30				
4-Chloroaniline	70	70	13-107	0	30				
bis(2-Chloroethoxy)methane	108*	109*	75-104	0	30				
bis(2-Chloroethyl)ether	106	106	60-116	0	30				
bis(2-Chloroisopropyl)ether	105	105	55-142	0	30				
2-Chloronaphthalene	79	79	50-141	0	30				
2-Chlorophenol	103	105	73-121	1	30				
4-Chlorophenyl-phenylether	104	107	80-109	3	30				
Chrysene	97	98	62-128	1	30				
Dibenz(a,h)anthracene	111	111	65-125	1	30				
Dibenzofuran	99	101	71-112	1	30				
1,2-Dichlorobenzene	89	88	66-108	1	30				

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,3-Dichlorobenzene	88	85	63-109	3	30				
1,4-Dichlorobenzene	88	87	58-108	2	30				
3,3'-Dichlorobenzidine	75	72	28-109	5	30				
2,4-Dichlorophenol	106	106	66-123	0	30				
Diethylphthalate	97	98	66-118	1	30				
2,4-Dimethylphenol	107	107	68-118	0	30				
3,5-Dimethylphenol	0*	0*	71-127	0	30				
Dimethylphthalate	100	102	64-118	2	30				
4,6-Dinitro-2-methylphenol	35	21	11-126	49*	30				
2,4-Dinitrophenol	31	32	20-143	1	30				
2,4-Dinitrotoluene	99	99	56-129	0	30				
2,6-Dinitrotoluene	102	106	69-123	3	30				
1,2-Diphenylhydrazine	112	115	71-129	3	30				
bis(2-Ethylhexyl)phthalate	104	104	63-122	0	30				
Fluoranthene	102	103	73-112	0	30				
Fluorene	101	102	63-121	1	30				
Hexachlorobenzene	107	109	77-114	2	30				
Hexachlorobutadiene	101	100	62-120	1	30				
Hexachlorocyclopentadiene	50	68	10-153	30	30				
Hexachloroethane	88	87	57-109	1	30				
Indeno(1,2,3-cd)pyrene	108	108	61-126	0	30				
Isophorone	109*	110*	73-102	1	30				
1-Methylnaphthalene	95	95	64-122	1	30				
2-Methylnaphthalene	99	98	76-114	2	30				
2-Methylphenol	105	106	75-111	1	30				
4-Methylphenol	105	105	59-123	0	30				
Naphthalene	99	98	72-116	1	30				
2-Nitroaniline	109	111	67-125	1	30				
3-Nitroaniline	99	98	59-122	1	30				
4-Nitroaniline	81	80	41-109	1	30				
Nitrobenzene	111	111	57-125	0	30				
2-Nitrophenol	105	102	56-127	3	30				
4-Nitrophenol	84	80	37-129	5	30				
N-Nitroso-di-n-propylamine	102	104	60-116	1	30				
N-Nitrosodimethylamine	110	114	47-116	4	30				
N-Nitrosodiphenylamine	103	105	71-122	2	30				
Di-n-octylphthalate	114	113	56-126	0	30				
Pentachlorophenol	78	58	28-127	31*	30				
Phenanthrene	97	98	65-125	1	30				
Phenol	103	105	58-126	2	30				
Pyrene	98	100	74-126	2	30				
1,2,4-Trichlorobenzene	100	99	72-115	1	30				
2,4,5-Trichlorophenol	105	106	58-129	0	30				
2,4,6-Trichlorophenol	109	108	56-134	2	30				

Batch number: 11291SLG026 Sample number(s): 6437193-6437197,6437201,6437204 UNSPK: 6437195
N-Nitrosodimethylamine 97 95 70-130 2 30

Batch number: 11298SLA026 Sample number(s): 6437193-6437197,6437201 UNSPK: 6437195
Acenaphthene 93 100 63-105 7 30
Acenaphthylene 90 97 67-114 7 30
Anthracene 94 102 73-115 8 30
Benzo(a)anthracene 95 101 59-128 6 30

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(a)pyrene	93	99	58-142	6	30				
Benzo(b)fluoranthene	98	105	54-163	7	30				
Benzo(g,h,i)perylene	78	85	33-141	9	30				
Benzo(k)fluoranthene	97	103	57-153	5	30				
Butylbenzylphthalate	107	120	57-173	11	30				
Di-n-butylphthalate	112	159*	65-148	34*	30				
Chrysene	94	101	67-123	7	30				
Dibenz(a,h)anthracene	85	94	22-133	10	30				
Diethylphthalate	102	126	70-136	21	30				
Dimethylphthalate	100	107	74-118	7	30				
Bis(2-Ethylhexyl)phthalate	119	100	39-167	13	30				
Fluoranthene	97	104	51-149	7	30				
Fluorene	97	104	66-122	7	30				
Indeno(1,2,3-cd)pyrene	84	92	21-143	9	30				
1-Methylnaphthalene	87	94	72-123	8	30				
2-Methylnaphthalene	85	92	64-103	7	30				
Naphthalene	90	95	61-102	5	30				
N-Nitrosodimethylamine	88	94	48-113	7	30				
Di-n-octylphthalate	139	113	40-192	21	30				
Phenanthrene	90	98	62-122	8	30				
Pyrene	94	100	51-131	6	30				

Batch number: 11293A16A
9a TPH by EPA 8015B Gas C5-C12

Sample number(s): 6437193-6437197,6437201 UNSPK: 6437195
77 76 39-118 9 30

Batch number: 112880015A
4-Amino-2,6-Dinitrotoluene
2-Amino-4,6-Dinitrotoluene
1,3-Dinitrobenzene
2,4-Dinitrotoluene
2,6-Dinitrotoluene
HMX
Nitrobenzene
Nitroglycerin
2-Nitrotoluene
3-Nitrotoluene
4-Nitrotoluene
PETN
RDX
Tetryl
1,3,5-Trinitrobenzene
2,4,6-Trinitrotoluene

Sample number(s): 6437193-6437197,6437199-6437201 UNSPK: 6437195
107 110 80-127 3 50
104 107 80-137 2 50
108 110 38-166 2 50
98 102 80-131 3 50
104 108 80-127 3 50
92 93 63-128 1 50
102 105 80-125 4 50
99 99 80-120 0 50
99 103 80-122 4 50
105 109 72-119 3 50
99 102 80-125 3 50
106 108 80-121 2 50
98 99 75-129 1 50
89 86 55-174 4 50
99 101 82-126 2 50
104 107 82-130 3 50

Batch number: 112910003A
20a Formaldehyde 8315A

Sample number(s): 6437193-6437197,6437199-6437201 UNSPK: 6437195
98 104 80-120 6 50

Batch number: 112910025A
PCB-1016
PCB-1260

Sample number(s): 6437193-6437197,6437199-6437201 UNSPK: 6437195
65 65 29-146 0 50
79 84 39-149 7 50

Batch number: 112870020A
Ethanol
Isopropanol

Sample number(s): 6437206 UNSPK: P434238
94 98 62-145 4 20
100 100 73-131 0 20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Methanol	80	96	52-159	16	20				
Batch number: 112900028A	Sample number(s): 6437193-6437197, 6437199-6437201 UNSPK: 6437195								
Ethanol	75	73	48-130	2	20				
Isopropanol	72	71	12-149	1	20				
Methanol	75	72	43-138	3	20				
Batch number: 112910030A	Sample number(s): 6437206 UNSPK: P435702								
Diethylene glycol	120	125	83-130	4	20				
Ethylene glycol	137*	137*	89-125	0	20				
Propylene glycol	135*	135*	91-128	0	20				
Batch number: 112980042A	Sample number(s): 6437193-6437197, 6437201 UNSPK: 6437195								
Diethylene glycol	47*	48*	59-109	3	20				
Ethylene glycol	75	75	63-107	1	20				
Propylene glycol	77	78	63-107	0	20				
Batch number: 112920027A	Sample number(s): 6437193-6437197, 6437199-6437201 UNSPK: 6437195								
EFH (C12-C14)	82	89	49-123	8	20				
EFH (C15-C20)	81	98	49-123	13	20				
EFH (C21-C30)	102	117	49-123	7	20				
EFH (C30 - C40)	110	138*	49-123	8	20				
EFH (C8-C11)	0*	5*	49-123	10	20				
Batch number: 112920028A	Sample number(s): 6437193-6437197, 6437199-6437201 UNSPK: 6437195								
m-Terphenyl	97	98	75-125	2	20				
o-Terphenyl	102	103	75-125	1	20				
p-Terphenyl	95	97	75-125	2	20				
Batch number: 112901026001A	Sample number(s): 6437193-6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
Antimony	39*	43*	75-125	8	20	0.135 J	0.126 J	7 (1)	20
Arsenic	101	108	75-125	3	20	3.78	3.79	0	20
Beryllium	91	102	75-125	8	20	0.484	0.538	11 (1)	20
Cadmium	111	108	75-125	2	20	0.0714 J	0.0880 J	21* (1)	20
Chromium	95	120	75-125	9	20	17.3	20.5	17	20
Cobalt	105	108	75-125	3	20	5.76	6.25	8	20
Copper	107	116	75-125	5	20	8.35	10.0	18	20
Lead	119	146*	75-125	10	20	4.54	5.21	14	20
Nickel	112	117	75-125	3	20	11.5	13.8	18	20
Silver	103	110	75-125	7	20	0.0337 J	0.0284 J	17 (1)	20
Thallium	104	122	75-125	11	20	0.244	0.284	15 (1)	20
Vanadium	99	137*	75-125	8	20	34.2	40.9	18	20
Zinc	111 (2)	145 (2)	75-125	5	20	55.0	64.0	15	20
Batch number: 112901026001B	Sample number(s): 6437193-6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
Selenium	103	118	75-125	13	20	0.162 J	0.153 J	6 (1)	20
Batch number: 112901026001C	Sample number(s): 6437193-6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
Molybdenum	104	111	75-125	7	20	0.266	0.289	8 (1)	20
Batch number: 112901026001D	Sample number(s): 6437193-6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
Barium	138 (2)	141 (2)	75-125	0	20	85.0	93.7	10	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 112905708002	Sample number(s): 6437193-6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
Aluminum	2054 (2)	1557 (2)	75-125	6	20	12,500	12,700	2	20
Boron	103	102	84-115	0	20	1.03 J	0.806 J	25* (1)	20
Calcium	156 (2)	118 (2)	75-125	4	20	3,410	3,450	1	20
Iron	2305 (2)	15740 (2)	75-125	45*	20	20,200	20,700	2	20
Lithium	101	98	82-114	2	20	27.6	28.3	3	20
Magnesium	398 (2)	211 (2)	75-125	5	20	6,060	6,060	0	20
Manganese	45 (2)	74 (2)	75-125	4	20	299	276	8	20
Phosphorus	86 (2)	91 (2)	75-125	1	20	435	405	7	20
Strontium	100	98	75-115	1	20	12.6	12.1	4	20
Tin	90	89	80-110	0	20	2.61 J	2.45 J	6 (1)	20
Titanium	307 (2)	281 (2)	75-125	2	20	1,210	1,180	2	20
Zirconium	97	97	81-110	1	20	0.897 J	1.34 J	40* (1)	20
Batch number: 112905711002	Sample number(s): 6437193-6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
Mercury	101	99	65-135	4	20	0.0068 J	0.0069 U	200* (1)	20
Batch number: 112985708002	Sample number(s): 6437193-6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
Potassium	128*	119	75-125	3	20	2,360	2,410	2	20
Sodium	99	97	75-125	4	20	118	115	3 (1)	20
Batch number: 11291243201A	Sample number(s): 6437193-6437194 UNSPK: P435690 BKG: P435690								
3a Cr VI by EPA 7199	91		75-125			0.20 U	0.20 U	0 (1)	20
Batch number: 11292243201A	Sample number(s): 6437195-6437196, 6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
3a Cr VI by EPA 7199	89		75-125			0.20 U	1.3	200* (1)	20
Batch number: 11293102201A	Sample number(s): 6437193-6437194 UNSPK: P435690 BKG: P435690								
16a Cyanide by 9012B	88		75-125			0.18 U	0.17 U	0 (1)	20
Batch number: 11293102201B	Sample number(s): 6437195-6437196, 6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
16a Cyanide by 9012B	99		75-125			0.18 U	0.18 U	0 (1)	20
Batch number: 11293621201A	Sample number(s): 6437193-6437196, 6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
7a Perchlorate EPA 314.0	113		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11298495201A	Sample number(s): 6437193-6437196, 6437198, 6437201 UNSPK: 6437195 BKG: 6437195								
11a Anions by 300.0 - Fluoride	70*		80-120			2.2	2.6	17 (1)	20
11a Anions by 300.0 - Nitrate	88		80-120			3.8	3.7	1 (1)	20
Batch number: 11299039402B	Sample number(s): 6437193-6437195, 6437198, 6437201 BKG: 6437195								
17a pH by 9045C						7.86	7.90	1	3
Batch number: 11291162401B	Sample number(s): 6437204 BKG: P431141								
Moisture Content by 160.3						4.4	4.3	2	20
Batch number: 11298162401B	Sample number(s): 6437193-6437199, 6437201 BKG: 6437195								
28a Moisture Content by 160.3						11.8	11.7	1	20
Moisture Content by 160.3						11.8	11.7	1	20
Moisture Content by 160.3						11.8	11.7	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 11290SLF026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6437193	96	96	89	97	89	87
6437194	98	99	85	97	90	86
6437195	99	101	88	100	92	89
6437196	101	104	97	103	94	88
6437197	101	104	92	103	95	87
6437201	100	101	80	98	88	86
Blank	96	97	99	98	88	87
LCS	98	98	103	99	89	85
MS	101	104	97	103	94	88
MSD	101	104	92	103	95	87
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 21b. NDMA in Water

Batch number: 11290WAA026

N-Nitrosodimethylamine-d6

6437202	115
6437203	113
6437206	117
Blank	102
LCS	101
LCSD	98
Limits:	50-150

Analysis Name: 5b Semivolatiles by EPA 8270C

Batch number: 11290WAB026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6437206	59	36	113	104	93	91
Blank	55	33	111	100	91	91
LCS	56	34	106	97	86	85
LCSD	65	40	113	106	93	88
Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 4b Select SVOC EPA 8270SIM

Batch number: 11290WAJ026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6437206	100	87	83
Blank	95	87	84
LCS	109	97	86
LCSD	110	94	85

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Surrogate Quality Control

Limits: 40-130 45-130 45-135

Analysis Name: 21a NDMA by 1625C
Batch number: 11291SLG026
N-Nitrosodimethylamine-
d6

6437193	94
6437194	99
6437195	88
6437196	94
6437197	77
6437201	77
6437204	83
Blank	124
LCS	120
MS	94
MSD	77

Limits: 50-150

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11298SLA026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6437193	101	93	83
6437194	91	59	79
6437195	92	85	92
6437196	94	86	91
6437197	100	91	97
6437201	97	88	81
Blank	105	101	110
LCS	100	91	97
MS	94	86	91
MSD	100	91	97

Limits: 40-130 45-130 45-135

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 11290B20A
Trifluorotoluene-F

6437205	86
6437206	87
Blank	84
LCS	109
LCSD	113

Limits: 63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 11293A16A
Trifluorotoluene-F

6437193	79
6437194	73
6437195	84

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Surrogate Quality Control

6437196 90
6437197 76
6437201 87
Blank 92
LCS 93
MS 90
MSD 76

Limits: 61-122

Analysis Name: 20b Formaldehyde 8315A
Batch number: 112880004A
Butyraldehyde

6437206 99
Blank 86
LCS 92
LCSD 96

Limits: 45-145

Analysis Name: 15a Energetics by 8330A
Batch number: 112880015A
2-Nitro-m-xylene

6437193 118
6437194 117
6437195 116
6437196 108
6437197 113
6437199 118
6437200 117
6437201 115
Blank 125
LCS 114
LCSD 113
MS 108
MSD 113

Limits: 80-146

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 112900011A
Tetrachloro-m-xylene Decachlorobiphenyl

6437206	97	109
Blank	94	78
LCS	90	90
LCSD	91	112

Limits: 30-150 45-120

Analysis Name: 15b Energetics by 8330A
Batch number: 112900016A
2-Nitro-m-xylene

6437206 92

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Surrogate Quality Control

Blank 98
LCS 97
LCSD 90

Limits: 50-134

Analysis Name: 20a Formaldehyde 8315A
Batch number: 112910003A
Butyraldehyde

6437193 80
6437194 95
6437195 91
6437196 80
6437197 84
6437199 77
6437200 90
6437201 73
Blank 87
LCS 86
MS 80
MSD 84

Limits: 64-126

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 112910025A
Tetrachloro-m-xylene Decachlorobiphenyl

6437193	74	92
6437194	72	85
6437195	62	88
6437196	74	84
6437197	61	89
6437199	72	87
6437200	77	92
6437201	71	81
Blank	82	93
LCS	73	89
LCSD	76	99
MS	74	84
MSD	61	89

Limits: 53-139 53-142

Analysis Name: 18b Alcohols by 8015B
Batch number: 112870020A
Acetone

6437206 91
Blank 89
LCS 89
MS 99
MSD 102

Limits: 54-147

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Surrogate Quality Control

Analysis Name: 22b Terphenyls by 8015B
Batch number: 112880013A
n-Triacontane-d62

6437206	77
Blank	73
LCS	67
LCSD	69

Limits: 17-138

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel
Batch number: 112900022A
Chlorobenzene Orthoterphenyl

6437206	82	83
Blank	79	79
LCS	86	91
LCSD	84	92

Limits: 28-152 52-131

Analysis Name: 18a Alcohols by 8015B
Batch number: 112900028A
Acetone

6437193	72
6437194	67
6437195	67
6437196	69
6437197	66
6437199	65
6437200	82
6437201	62
Blank	83
LCS	82
MS	69
MSD	66

Limits: 42-138

Analysis Name: 19b Glycols by 8015B
Batch number: 112910030A
Tetramethylene glycol

6437206	108
Blank	126
LCS	134
MS	124
MSD	129

Limits: 29-157

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 112920027A
Chlorobenzene Orthoterphenyl

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/18/11 at 09:28 AM

Group Number: 1271284

Surrogate Quality Control

6437193	52	81
6437194	52	79
6437195	65	85
6437196	77	86
6437197	80	90
6437199	73	86
6437200	87	90
6437201	75	86
Blank	82	88
LCS	88	92
MS	77	86
MSD	80	90

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B
Batch number: 112920028A
n-Triacontane-d62

6437193	76
6437194	75
6437195	79
6437196	79
6437197	79
6437199	78
6437200	76
6437201	76
Blank	80
LCS	79
MS	79
MSD	79

Limits: 19-152

Analysis Name: 19a Glycols by 8015B
Batch number: 112980042A
Tetramethylene glycol

6437193	90
6437194	88
6437195	85
6437196	88
6437197	87
6437201	87
Blank	100
LCS	99
MS	88
MSD	87

Limits: 29-137

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

acct #13013 Cp #1271284

sample # G437193-06

CHAIN OF CUSTODY RECORD

CDM	SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS										SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes						
NOTES: *Primary Analyses as indicated on sample labels *Secondary Analyses as indicated on sample labels *Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method #270C.																																	
Signatures: <i>[Signature]</i>																																	
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 8010/8270/8471/1	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCB/PCTs EPA 8062	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chlorine EPA 7189	*pH EPA 8045/8040B	*Perchlorate Confirmation by EPA 8850 (10%)	*TPH-GRO EPA 8015B \$	*TPH-EFH EPA 8015B Mod.	*Nitrate EPA 300.0	*Formaldehyde EPA 8315A	*NDMA EPA 1631C	*Emeraldine EPA 8330A	*Cyanide EPA 8012B	*Terphenyls EPA 8015B	*Glycol EPA 8015B	*Alcohol EPA 8015B	*Dioxane EPA 8270								
SL-005-SA3-SB-4.5	10.13.11	1204	SOIL	NONE	2-Encores										X																		
SL-005-SA3-SB-4.0-5.0	10.13.11	1209	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X									
SL-004-SA3-SB-8.0	10.13.11	1127	SOIL	NONE	2-Encores										X																		
SL-005-SA3-SB-7.5-8.5	10.13.11	1134	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X									
SL-089-SA7-SB-4.0MS	10.13.11	1230	SOIL	NONE	6-Encores										X										MS/MSD								
SL-089-SA7-SB-3.5-4.5MS	10.13.11	1235	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	MS/MSD								
DUP03-SA7-QC-101311	10.13.11	1240	SOIL	NONE	2-Encores										X																		
DUP03-SA7-QC-101311	10.13.11	1240	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X									
EB-SA7-SB-101311	10.13.11	1430	WATER	NONE	1 L Amber													X							HGL ASTM H WATER-HA crew								
SL-089-SA7-SB-2.5	10.12.11	1145	SOIL	NONE	2-Encores										X										sampled 10.12.11								
TB-101311	10.13.11	0800	WATER	NONE	1-1 L Amber													X															
TB-101311	10.13.11	0800	SOIL	NONE	1-4 oz Jar													X															
TB-101311	10.13.11	0800	WATER	NONE	2-40 mL Vials										X																		
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																			Laboratory:										
<i>[Signature]</i>		10/13/2011 / 1630		<i>[Signature]</i>																			Lancaster Laboratories, Inc.										
Received by: (Signature)		Date/Time		Airbill No.(s)																													
				8767 9857 5154,5132,5143																			<i>Suzette Lehman 10/14/11 0915</i>										

SL-096-SA7-SB-2.5 encores were logged in as additional volume for LLI #G435696 (DE267)
per PH. NIM 10/18/11

acct #13013 Cp #1271284

sample # G437193-06

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS												SECONDARY FOR ALL LOCATIONS												Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (BA6) & Subarea 7 (BA7) also report Tetralin under EPA Method 8270C.							*Metals EPA 8010/8203/8471/A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCPs EPA 8062	*Dioxin/Furan EPA 1613B	*Pesticides EPA 314.0	*Hex Chrome EPA 7189	*pH EPA 8045/8040B	Pesticide Confirmation by EPA 6850 (10%)	TPH-GRO EPA 8015B \$	*TPH-EFH EPA 8015B Mod.	*Nitrates EPA 300.0	*Formaldehyde EPA 8315A	*p-NDMA EPA 1625C	*Emeralds EPA 8330A	*Cyanide EPA 8012B	*Terphenyls EPA 8018B	*Glycols EPA 8015B	*Alcohols EPA 8015B	*Dioxins EPA 8270					
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																										
EB-SA7-SB-101311	10.13.11	1400	WATER	NONE	10-1 liter ambers			X	X	X													X	EB collected for HA crew							
EB-SA7-SB-101311	10.13.11	1400	WATER	NONE	1-500 mL poly		X																								
EB-SA7-SB-101311	10.13.11	1400	WATER	HNO3	1-500 mL poly	X																									
EB-SA7-SB-101311	10.13.11	1400	WATER	NaOH	1-500 mL poly														X												
EB-SA7-SB-101311	10.13.11	1400	WATER	NONE	1-250 mL glass												X														
EB-SA7-SB-101311	10.13.11	1400	WATER	HCL	11-40 mL vials									X								X									
EB-SA7-SB-101311	10.13.11	1400	WATER	NONE	4-40 mL vials										X							X									
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																				Laboratory:							
		10/13/2011 / 1630																						Lancaster Laboratories, Inc.							
Received by: (Signature)		Date/Time		Airbill No.(s)																											
				8767 9857 5154,5132,5143																				10/14/11 0915							

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Thursday, October 13, 2011 2:42 PM
To: Nicole Maljovec
Subject: RE: SSFL COC 10/12/11- SL-096-SA7-SB-2.0-3.0 Soil empty encores

Yes, I found them! I need to really check those encores, you would think I would be able to feel the difference between an empty pouch and a full one!

I'll send them today!

Pamela Hartman
CDM
523 W 6th St #400
Los Angeles, CA 90014
Cell 714-900-0916
Direct 818-466-8007

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]
Sent: Thursday, October 13, 2011 11:35 AM
To: Hartman, Pamela
Subject: FW: SSFL COC 10/12/11- SL-096-SA7-SB-2.0-3.0 Soil empty encores

Hi Pam,
The encores for SL-096-SA7-SB-2.5 were empty. Do you think the full encores are still in CA? if so, as long as we get them tomorrow, we'll still be able to prep within the holding time.

Thanks!
Nicole

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]
Sent: Wednesday, October 12, 2011 7:29 PM
To: Bloisa, Peggy; Burgess, Todd; Cortes, Vidal A.; 'Laura Rainey'; SA Env Entry; TWallbom@dtsc.ca.gov; Nicole Maljovec; Zakowski, Cherie
Subject: SSFL COC 10/12/11

Subsurface sampling continued with two crews in SA3 and SA7. It was a hot one out there today!

Please see attached COC.

Thanks,

Pam

Pamela Hartman
CDM
523 W 6th St #400
Los Angeles, CA 90014
Cell 714-900-0916
Direct 818-466-8007

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

October 31, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/14/2011

Group Number: 1271287

SDG: DX150

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-005-SA3-SB-4.0-5.0 Soil
SL-005-SA3-SB-7.5-8.5 Soil
SL-089-SA7-SB-3.5-4.5 Soil
SL-089-SA7-SB-3.5-4.5MS Soil
SL-089-SA7-SB-3.5-4.5MSD Soil
DUP09-SA7-QC-101311 Soil
EB-SA7-SB-101311 WaterLancaster Labs (LLI) #6437218
6437219
6437220
6437221
6437222
6437223
6437224

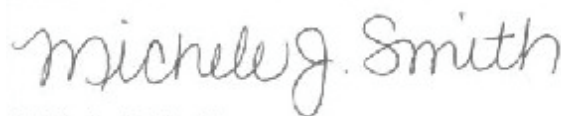
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
ELECTRONIC Data Package Group
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437218
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5001 SDG#: DX150-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	8.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437218
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5001 SDG#: DX150-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0380 U	0.0380	1.06	1
11031	12378-PeCDD	40321-76-4	0.0330 JBQ	0.0324	5.30	1
11031	123478-HxCDD	39227-28-6	0.0237 U	0.0237	5.30	1
11031	123678-HxCDD	57653-85-7	0.0467 JBQ	0.0239	5.30	1
11031	123789-HxCDD	19408-74-3	0.0620 JBQ	0.0241	5.30	1
11031	1234678-HpCDD	35822-46-9	0.646 JB	0.0317	5.30	1
11031	OCDD	3268-87-9	4.27 JB	0.0337	10.6	1
11031	2378-TCDF	51207-31-9	0.0292 U	0.0292	1.06	1
11031	12378-PeCDF	57117-41-6	0.0490 JBQ	0.0169	5.30	1
11031	23478-PeCDF	57117-31-4	0.0572 JBQ	0.0164	5.30	1
11031	123478-HxCDF	70648-26-9	0.0405 JQ	0.0171	5.30	1
11031	123678-HxCDF	57117-44-9	0.0484 JBQ	0.0152	5.30	1
11031	123789-HxCDF	72918-21-9	0.0179 U	0.0179	5.30	1
11031	234678-HxCDF	60851-34-5	0.0386 JBQ	0.0149	5.30	1
11031	1234678-HpCDF	67562-39-4	0.207 JB	0.0149	5.30	1
11031	1234789-HpCDF	55673-89-7	0.0417 JB	0.0234	5.30	1
11031	OCDF	39001-02-0	0.392 JBQ	0.0494	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present



Analysis Report

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Page 3 of 4

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437218
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5001 SDG#: DX150-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-005-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437218
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/14/2011 09:15

Suite 210

Reported: 10/31/2011 15:51

Chantilly VA 20151

X5001 SDG#: DX150-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11300001	10/29/2011 13:26	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11300001	10/27/2011 09:00	Ginelle L Haines	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437219
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5002 SDG#: DX150-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	16.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437219
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5002 SDG#: DX150-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0358 U	0.0358	1.16	1
11031	12378-PeCDD	40321-76-4	0.0472 JBQ	0.0304	5.80	1
11031	123478-HxCDD	39227-28-6	0.0240 JBQ	0.0197	5.80	1
11031	123678-HxCDD	57653-85-7	0.0412 JB	0.0200	5.80	1
11031	123789-HxCDD	19408-74-3	0.0215 JBQ	0.0205	5.80	1
11031	1234678-HpCDD	35822-46-9	0.266 JBQ	0.0244	5.80	1
11031	OCDD	3268-87-9	0.630 JB	0.0266	11.6	1
11031	2378-TCDF	51207-31-9	0.0285 JQ	0.0261	1.16	1
11031	12378-PeCDF	57117-41-6	0.0147 U	0.0147	5.80	1
11031	23478-PeCDF	57117-31-4	0.0682 JBQ	0.0149	5.80	1
11031	123478-HxCDF	70648-26-9	0.0469 J	0.0153	5.80	1
11031	123678-HxCDF	57117-44-9	0.0195 JBQ	0.0120	5.80	1
11031	123789-HxCDF	72918-21-9	0.0322 JBQ	0.0163	5.80	1
11031	234678-HxCDF	60851-34-5	0.0460 JBQ	0.0132	5.80	1
11031	1234678-HpCDF	67562-39-4	0.115 JBQ	0.0113	5.80	1
11031	1234789-HpCDF	55673-89-7	0.0359 JBQ	0.0198	5.80	1
11031	OCDF	39001-02-0	0.159 JBQ	0.0472	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present



Analysis Report

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Page 3 of 4

Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437219
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5002 SDG#: DX150-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-005-SA3-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437219
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5002 SDG#: DX150-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11300001	10/29/2011 14:23	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11300001	10/27/2011 09:00	Ginelle L Haines	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437220
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	11.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437220
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0332 U	0.0332	1.12	1
11031	12378-PeCDD	40321-76-4	0.0421 JBQ	0.0282	5.60	1
11031	123478-HxCDD	39227-28-6	0.0699 JB	0.0303	5.60	1
11031	123678-HxCDD	57653-85-7	0.253 JB	0.0300	5.60	1
11031	123789-HxCDD	19408-74-3	0.119 JBQ	0.0283	5.60	1
11031	1234678-HpCDD	35822-46-9	4.64 JB	0.0430	5.60	1
11031	OCDD	3268-87-9	44.4 B	0.0426	11.2	1
11031	2378-TCDF	51207-31-9	0.0780 JQ	0.0325	1.12	1
11031	12378-PeCDF	57117-41-6	0.0524 JBQ	0.0194	5.60	1
11031	23478-PeCDF	57117-31-4	0.196 JBQ	0.0212	5.60	1
11031	123478-HxCDF	70648-26-9	0.328 J	0.0264	5.60	1
11031	123678-HxCDF	57117-44-9	0.0847 JB	0.0212	5.60	1
11031	123789-HxCDF	72918-21-9	0.0800 JB	0.0294	5.60	1
11031	234678-HxCDF	60851-34-5	0.146 JBQ	0.0220	5.60	1
11031	1234678-HpCDF	67562-39-4	0.936 JB	0.0189	5.60	1
11031	1234789-HpCDF	55673-89-7	0.0695 JBQ	0.0400	5.60	1
11031	OCDF	39001-02-0	2.37 JB	0.0520	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437220
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

Sample Description: SL-089-SA7-SB-3.5-4.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437220
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11300001	10/29/2011 15:19	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11300001	10/27/2011 09:00	Ginelle L Haines	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437221
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	11.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437221
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.1	0.0413	1.13	1
11031	12378-PeCDD	40321-76-4	114 B	0.0536	5.64	1
11031	123478-HxCDD	39227-28-6	111 B	0.0465	5.64	1
11031	123678-HxCDD	57653-85-7	104 B	0.0498	5.64	1
11031	123789-HxCDD	19408-74-3	113 B	0.0507	5.64	1
11031	1234678-HpCDD	35822-46-9	113 B	0.0695	5.64	1
11031	OCDD	3268-87-9	257 B	0.0707	11.3	1
11031	2378-TCDF	51207-31-9	22.2	0.0491	1.13	1
11031	12378-PeCDF	57117-41-6	112 B	0.0320	5.64	1
11031	23478-PeCDF	57117-31-4	107 B	0.0328	5.64	1
11031	123478-HxCDF	70648-26-9	109	0.0593	5.64	1
11031	123678-HxCDF	57117-44-9	109 B	0.0535	5.64	1
11031	123789-HxCDF	72918-21-9	111 B	0.0698	5.64	1
11031	234678-HxCDF	60851-34-5	107 B	0.0546	5.64	1
11031	1234678-HpCDF	67562-39-4	101 B	0.0464	5.64	1
11031	1234789-HpCDF	55673-89-7	108 B	0.0759	5.64	1
11031	OCDF	39001-02-0	220 B	0.0825	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	92	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present



Analysis Report

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Page 3 of 4

Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437221
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-089-SA7-SB-3.5-4.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437221
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11300001	10/29/2011 16:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11300001	10/27/2011 09:00	Ginelle L Haines	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437222
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	11.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437222
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.6	0.0478	1.09	1
11031	12378-PeCDD	40321-76-4	111 B	0.0447	5.44	1
11031	123478-HxCDD	39227-28-6	105 B	0.0562	5.44	1
11031	123678-HxCDD	57653-85-7	101 B	0.0582	5.44	1
11031	123789-HxCDD	19408-74-3	110 B	0.0568	5.44	1
11031	1234678-HpCDD	35822-46-9	111 B	0.0766	5.44	1
11031	OCDD	3268-87-9	251 B	0.0676	10.9	1
11031	2378-TCDF	51207-31-9	20.6	0.0490	1.09	1
11031	12378-PeCDF	57117-41-6	109 B	0.0336	5.44	1
11031	23478-PeCDF	57117-31-4	102 B	0.0327	5.44	1
11031	123478-HxCDF	70648-26-9	105	0.0710	5.44	1
11031	123678-HxCDF	57117-44-9	106 B	0.0628	5.44	1
11031	123789-HxCDF	72918-21-9	107 B	0.0774	5.44	1
11031	234678-HxCDF	60851-34-5	104 B	0.0622	5.44	1
11031	1234678-HpCDF	67562-39-4	97.6 B	0.0525	5.44	1
11031	1234789-HpCDF	55673-89-7	103 B	0.0947	5.44	1
11031	OCDF	39001-02-0	209 B	0.0802	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	52	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437222
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5003 SDG#: DX150-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-089-SA7-SB-3.5-4.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437222
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/14/2011 09:15

Suite 210

Reported: 10/31/2011 15:51

Chantilly VA 20151

X5003 SDG#: DX150-03MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11300001	10/29/2011 17:12	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11300001	10/27/2011 09:00	Ginelle L Haines	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437223
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5004 SDG#: DX150-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	10.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437223
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5004 SDG#: DX150-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0366 J	0.0332	1.12	1
11031	12378-PeCDD	40321-76-4	0.0835 JBQ	0.0298	5.59	1
11031	123478-HxCDD	39227-28-6	0.0729 JBQ	0.0306	5.59	1
11031	123678-HxCDD	57653-85-7	0.188 JBQ	0.0309	5.59	1
11031	123789-HxCDD	19408-74-3	0.150 JBQ	0.0293	5.59	1
11031	1234678-HpCDD	35822-46-9	4.45 JB	0.0370	5.59	1
11031	OCDD	3268-87-9	39.5 B	0.0509	11.2	1
11031	2378-TCDF	51207-31-9	0.0570 JQ	0.0293	1.12	1
11031	12378-PeCDF	57117-41-6	0.0785 JBQ	0.0201	5.59	1
11031	23478-PeCDF	57117-31-4	0.128 JBQ	0.0202	5.59	1
11031	123478-HxCDF	70648-26-9	0.244 JQ	0.0247	5.59	1
11031	123678-HxCDF	57117-44-9	0.0971 JB	0.0226	5.59	1
11031	123789-HxCDF	72918-21-9	0.0436 JB	0.0268	5.59	1
11031	234678-HxCDF	60851-34-5	0.153 JBQ	0.0212	5.59	1
11031	1234678-HpCDF	67562-39-4	0.789 JB	0.0183	5.59	1
11031	1234789-HpCDF	55673-89-7	0.111 JB	0.0305	5.59	1
11031	OCDF	39001-02-0	2.24 JB	0.0450	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present



Analysis Report

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Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437223
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5004 SDG#: DX150-04FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: DUP09-SA7-QC-101311 Soil
SSFL Area IV Collocated Soil Sampling
DUP09-SA7-QC-101311

LLI Sample # SW 6437223
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5004 SDG#: DX150-04FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11300001	10/29/2011 18:09	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11300001	10/27/2011 09:00	Ginelle L Haines	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162401B	10/25/2011 18:57	Scott W Freisher	1

Sample Description: EB-SA7-SB-101311 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101311

LLI Sample # WW 6437224
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5005 SDG#: DX150-05EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.335	U	0.335	2.00	1
10915	12378-PeCDD	40321-76-4	0.261	U	0.261	9.99	1
10915	123478-HxCDD	39227-28-6	0.227	U	0.227	9.99	1
10915	123678-HxCDD	57653-85-7	0.265	JQ	0.224	9.99	1
10915	123789-HxCDD	19408-74-3	0.225	U	0.225	9.99	1
10915	1234678-HpCDD	35822-46-9	3.09	JB	0.265	9.99	1
10915	OCDD	3268-87-9	6.33	JB	0.232	20.0	1
10915	2378-TCDF	51207-31-9	0.228	U	0.228	2.00	1
10915	12378-PeCDF	57117-41-6	0.147	U	0.147	9.99	1
10915	23478-PeCDF	57117-31-4	0.419	JBQ	0.128	9.99	1
10915	123478-HxCDF	70648-26-9	0.423	JB	0.143	9.99	1
10915	123678-HxCDF	57117-44-9	0.458	JBQ	0.145	9.99	1
10915	123789-HxCDF	72918-21-9	0.144	U	0.144	9.99	1
10915	234678-HxCDF	60851-34-5	0.416	JB	0.124	9.99	1
10915	1234678-HpCDF	67562-39-4	2.11	JB	0.110	9.99	1
10915	1234789-HpCDF	55673-89-7	0.292	JBQ	0.120	9.99	1
10915	OCDF	39001-02-0	1.70	JB	0.276	20.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	68	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present



Analysis Report

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Sample Description: EB-SA7-SB-101311 Water
SSFL Area IV Collocated Soil Sampling
EB-SA7-SB-101311

LLI Sample # WW 6437224
LLI Group # 1271287
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 10/31/2011 15:51

X5005 SDG#: DX150-05EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11292001	10/21/2011 22:11	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	11292001	10/19/2011 06:40	Ginelle L Haines	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/31/11 at 03:51 PM

Group Number: 1271287

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11298162401B Moisture Content by 160.3	Sample number(s): 6437218-6437223				100		80-120		

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11292001	Sample number(s): 6437224								
2378-TCDD	0.360 U	0.360	2.00	pg/l	103		67-158		
12378-PeCDD	0.541 J	0.280	10.0	pg/l	100		70-142		
123478-HxCDD	0.226 U	0.226	10.0	pg/l	97		70-164		
123678-HxCDD	0.230 U	0.230	10.0	pg/l	94		76-134		
123789-HxCDD	0.623 J	0.222	10.0	pg/l	100		64-162		
1234678-HpCDD	2.75 J	0.205	10.0	pg/l	99		70-140		
OCDD	5.09 J	0.237	20.0	pg/l	98		78-144		
2378-TCDF	0.242 U	0.242	2.00	pg/l	90		75-158		
12378-PeCDF	0.414 J	0.162	10.0	pg/l	100		80-134		
23478-PeCDF	0.934 J	0.145	10.0	pg/l	90		68-160		
123478-HxCDF	0.536 J	0.145	10.0	pg/l	98		72-134		
123678-HxCDF	0.592 J	0.145	10.0	pg/l	97		84-130		
123789-HxCDF	0.484 J	0.164	10.0	pg/l	97		78-130		
234678-HxCDF	0.606 J	0.139	10.0	pg/l	94		70-156		
1234678-HpCDF	2.04 J	0.125	10.0	pg/l	90		82-122		
1234789-HpCDF	0.351 J	0.138	10.0	pg/l	96		78-138		
OCDF	1.52 J	0.243	20.0	pg/l	98		63-170		

Batch number: 11300001	Sample number(s): 6437218-6437223								
2378-TCDD	0.0422 U	0.0422	1.00	ng/kg	107		67-158		
12378-PeCDD	0.0804 J	0.0346	5.00	ng/kg	105		70-142		
123478-HxCDD	0.0345 J	0.0262	5.00	ng/kg	97		70-164		
123678-HxCDD	0.0438 J	0.0267	5.00	ng/kg	94		76-134		
123789-HxCDD	0.0427 J	0.0259	5.00	ng/kg	101		64-162		
1234678-HpCDD	0.295 J	0.0295	5.00	ng/kg	97		70-140		
OCDD	0.493 J	0.0380	10.0	ng/kg	96		78-144		
2378-TCDF	0.0353 U	0.0353	1.00	ng/kg	103		75-158		
12378-PeCDF	0.0458 J	0.0185	5.00	ng/kg	101		80-134		
23478-PeCDF	0.0744 J	0.0187	5.00	ng/kg	96		68-160		
123478-HxCDF	0.0234 U	0.0234	5.00	ng/kg	96		72-134		
123678-HxCDF	0.0512 J	0.0189	5.00	ng/kg	97		84-130		
123789-HxCDF	0.0857 J	0.0250	5.00	ng/kg	99		78-130		
234678-HxCDF	0.0555 J	0.0210	5.00	ng/kg	94		70-156		
1234678-HpCDF	0.128 J	0.0153	5.00	ng/kg	90		82-122		
1234789-HpCDF	0.0489 J	0.0291	5.00	ng/kg	96		78-138		
OCDF	0.188 J	0.0680	10.0	ng/kg	96		63-170		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/31/11 at 03:51 PM

Group Number: 1271287

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11298162401B Moisture Content by 160.3	Sample number(s): 6437218-6437223				BKG: P437195 11.8		11.7	1	20
Batch number: 11300001	Sample number(s): 6437218-6437223				UNSPK: 6437220				
2378-TCDD	103	109	67-158	2	25				
12378-PeCDD	101	102	70-142	3	25				
123478-HxCDD	99	96	70-164	6	25				
123678-HxCDD	92	93	76-134	3	25				
123789-HxCDD	101	101	64-162	3	25				
1234678-HpCDD	96	98	70-140	2	25				
OCDD	94	95	78-144	2	25				
2378-TCDF	98	94	75-158	8	25				
12378-PeCDF	99	100	80-134	2	25				
23478-PeCDF	95	94	68-160	5	25				
123478-HxCDF	97	96	72-134	4	25				
123678-HxCDF	96	97	84-130	3	25				
123789-HxCDF	99	99	78-130	4	25				
234678-HxCDF	95	96	70-156	3	25				
1234678-HpCDF	89	89	82-122	3	25				
1234789-HpCDF	95	94	78-138	5	25				
OCDF	96	95	63-170	5	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11292001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6437224	72	73	65	65	70	71
Blank	66	73	67	67	70	72
OPR	71	69	68	69	70	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
6437224	68	73	73	71	72	73
Blank	75	82	89	71	73	75
OPR	74	76	77	69	72	75
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/31/11 at 03:51 PM

Group Number: 1271287

Surrogate Quality Control

6437224	71	75	75	74	70	
Blank	74	83	92	72	71	
OPR	74	79	81	72	68	
Limits:	28-130	23-140	17-157	24-169	24-185	
Analysis Name: 10a Dioxin/Furan by EPA 1613B						
Batch number: 11300001						
	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6437218	68	65	64	70	69	69
6437219	72	66	61	72	70	67
6437220	78	69	60	75	70	62
6437221	78	72	72	81	81	73
6437222	71	67	64	72	72	67
6437223	74	70	66	73	72	68
Blank	58	52	46	57	53	52
MS	78	72	72	81	81	73
MSD	71	67	64	72	72	67
OPR	63	57	56	65	59	59
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
6437218	80	62	60	69	74	77
6437219	86	60	55	73	82	82
6437220	90	54	49	78	83	84
6437221	95	68	68	79	90	92
6437222	84	58	52	73	82	81
6437223	82	60	57	73	79	79
Blank	69	45	42	59	62	65
MS	95	68	68	79	90	92
MSD	84	58	52	73	82	81
OPR	80	53	51	65	72	72
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
6437218	74	77	75	66	70	
6437219	80	80	75	66	75	
6437220	83	81	77	72	82	
6437221	89	88	88	74	82	
6437222	80	79	76	69	75	
6437223	79	78	77	72	76	
Blank	63	65	62	52	59	
MS	89	88	88	74	82	
MSD	80	79	76	69	75	
OPR	71	74	70	56	65	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

acct #13013 Cp#1271287

sample 6437213-24

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. Jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.		SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020/8274/11A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1631B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 8045C/8040B	Perchlorate Confirmation by EPA 8850 (10%)	*TPH-GRO EPA 8015B \$	**TPH-LEFT EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8300A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	
		SL-005-SA3-SB-4.5	10.13.11	1204	SOIL	NONE	2-Encores									X											
		SL-005-SA3-SB-4.0-5.0	10.13.11	1209	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	
		SL-005-SA3-SB-8.0	10.13.11	1127	SOIL	NONE	2-Encores									X											
		SL-005-SA3-SB-7.5-8.5	10.13.11	1134	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	
		SL-089-SA7-SB-4.0MS	10.13.11	1230	SOIL	NONE	6-Encores									X										MS/MSD	
		SL-089-SA7-SB-3.5-4.5MS	10.13.11	1235	SOIL	NONE	4-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	MS/MSD
		DUP09-SA7-QC-101311	10.13.11	1240	SOIL	NONE	2-Encores									X											
		DUP09-SA7-QC-101311	10.13.11	1240	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	
		EB-SA7-SB-101311	10.13.11	1430	WATER	NONE	1 L Amber													X							
		SL-096-SA7-SB-2.5	10.12.11	1145	SOIL	NONE	2-Encores									X										HGL ASTM II WATER-HA crew sampled 10.12.11	
		TB-101311	10.13.11	0800	WATER	NONE	1-1 L Amber													X							
		TB-101311	10.13.11	0800	SOIL	NONE	1-4 oz Jar													X							
		TB-101311	10.13.11	0800	WATER	NONE	2-40 mL Vials									X											
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)													Laboratory:										
		10/13/2011 / 1630															Lancaster Laboratories, Inc.										
Received by: (Signature)		Date/Time		Airbill No.(s)													<i>Suzette Lehman</i> 10/14/11 0915										
				8767 9857 5154,5132,5143																							

acct#13013 Cp#1271287

sample# 6437218-24

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes	
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.		SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 8010/8020E&7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrom EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	TPH-GRO EPA 8015B \$	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**H-NDMA EPA 1625C	**Energelics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B		**Dowanol EPA 8270
		EB-SA7-SB-101311	10.13.11	1400	WATER	NONE	10-1 liter ambers		X	X	X						X				X						X	EB collected for HA crew
		EB-SA7-SB-101311	10.13.11	1400	WATER	NONE	1-500 mL poly		X			X	X	X														
		EB-SA7-SB-101311	10.13.11	1400	WATER	HNO3	1-500 mL poly	X																				
		EB-SA7-SB-101311	10.13.11	1400	WATER	NaOH	1-500 mL poly															X						
		EB-SA7-SB-101311	10.13.11	1400	WATER	NONE	1-250 mL glass													X								
		EB-SA7-SB-101311	10.13.11	1400	WATER	HCL	11-40 mL vials									X									X			
		EB-SA7-SB-101311	10.13.11	1400	WATER	NONE	4-40 mL vials											X						X				
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																					Laboratory:			
		10/13/2011 / 1630																							Lancaster Laboratories, Inc.			
Received by: (Signature)		Date/Time		Airbill No.(s)																								
				8767 9857 5154,5132,5143				Suzette Lehman 10/14/11 0915																				

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

November 09, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/15/2011

Group Number: 1271484

SDG: DE269

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-006-SA3-SB-4.0-5.0 Soil	6438618
SL-006-SA3-SB-9.0-10.0 Soil	6438619
SL-036-SA5DS-SB-4.0-5.0 Soil	6438620
SL-036-SA5DS-SB-9.0-10.0 Soil	6438621
SL-037-SA5DS-SB-4.0-5.0 Soil	6438622
SL-037-SA5DS-SB-9.0-10.0 Soil	6438623
SL-038-SA5DS-SB-4.0-5.0 Soil	6438624
SL-038-SA5DS-SB-9.0-10.0 Soil	6438625
SL-164-SA7-SB-0.5-1.5 Soil	6438626
EB-SA3-SB-101411 Water	6438627
TB-101411 Water	6438628
TB-101411 Sand	6438629

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgesser

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Sarah M. Snyder
Senior Specialist

Sample Description: SL-006-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-4.0-5.0

LLI Sample # SW 6438618
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 15:29

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6901 SDG#: DE269-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-4.0-5.0

LLI Sample # SW 6438618
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 15:29

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6901 SDG#: DE269-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73 U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.37 U	0.37	1.8		1
10138	Anthracene	120-12-7	0.37 U	0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73 U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73 U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73 U	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73 U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73 U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6 U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6 U	6.6	20		1
10138	Chrysene	218-01-9	0.37 U	0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73 U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6 U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6 U	6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.6 U	6.6	20		1
10138	Fluoranthene	206-44-0	0.73 U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73 U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73 U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6 U	6.6	20		1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36 U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36 U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36 U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43 U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-4.0-5.0

LLI Sample # SW 6438618
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 15:29

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6901 SDG#: DE269-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	21,500	6.48	21.4		1
07914	Boron	7440-42-8	0.385 U	0.385	5.35		1
01650	Calcium	7440-70-2	1,400	2.68	21.4		1
01654	Iron	7439-89-6	18,300	2.79	21.4		1
01656	Lithium	7439-93-2	21.2	0.66	2.1		1
01657	Magnesium	7439-95-4	3,340	0.471	10.7		1
06958	Manganese	7439-96-5	176	0.0385	0.535		1
10145	Phosphorus	7723-14-0	119	0.375	10.7		1
01662	Potassium	7440-09-7	2,230	12.0	53.0		1
01667	Sodium	7440-23-5	86.7 J	6.31	106		1
07968	Strontium	7440-24-6	20.1	0.0268	0.535		1
06969	Tin	7440-31-5	2.71 J	0.343	10.7		1
06970	Titanium	7440-32-6	1,080	0.0760	1.07		1
10146	Zirconium	7440-67-7	1.24 J	0.492	5.35		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0784 U	0.0784	0.212		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.53	0.0848	0.424		2
06126	Barium	7440-39-3	74.4	0.112	0.424		2
06127	Beryllium	7440-41-7	0.768	0.0170	0.106		2
06128	Cadmium	7440-43-9	0.0492 J	0.0466	0.106		2
06131	Chromium	7440-47-3	12.6	0.127	0.424		2
06132	Cobalt	7440-48-4	5.35	0.0212	0.106		2
06133	Copper	7440-50-8	4.36	0.0848	0.424		2
06135	Lead	7439-92-1	5.91	0.0108	0.212		2
06138	Molybdenum	7439-98-7	0.821	0.0530	0.106		2
06139	Nickel	7440-02-0	7.96	0.106	0.424		2
06141	Selenium	7782-49-2	0.131 J	0.0615	0.424		2
06142	Silver	7440-22-4	0.0498 J	0.0151	0.106		2
06145	Thallium	7440-28-0	0.258	0.0318	0.106		2
06148	Vanadium	7440-62-2	29.0	0.0233	0.106		2
06149	Zinc	7440-66-6	50.0	0.594	3.18		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0075 U	0.0075	0.106		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7	0.86	1.1		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	33.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-4.0-5.0

LLI Sample # SW 6438618
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 15:29

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6901 SDG#: DE269-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.77 J	0.22	1.1		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	7.03	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	9.3	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11291SLD026	10/21/2011 06:41	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11291SLE026	10/21/2011 12:59	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11291SLE026	10/18/2011 21:35	Karen L Beyer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11291SLD026	10/18/2011 21:35	Karen L Beyer	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/21/2011 11:49	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 10:52	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 10:52	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 03:04	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-4.0-5.0

LLI Sample # SW 6438618
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 15:29

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/15/2011 09:45

Suite 210

Reported: 11/09/2011 11:09

Chantilly VA 20151

E6901 SDG#: DE269-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 07:54	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 07:54	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 07:54	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 07:54	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 09:56	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201A	10/27/2011 12:01	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201B	10/20/2011 14:50	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11292243201A	10/20/2011 17:07	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201A	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201B	10/20/2011 06:30	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402A	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

Sample Description: SL-006-SA3-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-9.0-10.0

LLI Sample # SW 6438619
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6902 SDG#: DE269-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA3-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-9.0-10.0

LLI Sample # SW 6438619
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6902 SDG#: DE269-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75 U	0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.37 U	0.37	1.9		1
10138	Anthracene	120-12-7	0.37 U	0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.75 U	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.75 U	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.75 U	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.75 U	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75 U	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.7 U	6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7 U	6.7	20		1
10138	Chrysene	218-01-9	0.37 U	0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.75 U	0.75	1.9		1
10138	Diethylphthalate	84-66-2	6.7 U	6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7 U	6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	28	6.7	20		1
10138	Fluoranthene	206-44-0	0.75 U	0.75	1.9		1
10138	Fluorene	86-73-7	0.75 U	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75 U	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.75 U	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.75 U	0.75	1.9		1
10138	Naphthalene	91-20-3	0.75 U	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75 U	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7 U	6.7	20		1
10138	Phenanthrene	85-01-8	0.75 U	0.75	1.9		1
10138	Pyrene	129-00-0	0.75 U	0.75	1.9		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.37 U	0.37	1.9		1
10225	PCB-1232	11141-16-5	0.37 U	0.37	1.9		1
10225	PCB-1242	53469-21-9	0.37 U	0.37	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.44 U	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA3-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-9.0-10.0

LLI Sample # SW 6438619
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6902 SDG#: DE269-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,500	6.72	22.2		1
07914	Boron	7440-42-8	0.400 U	0.400	5.55		1
01650	Calcium	7440-70-2	1,170	2.78	22.2		1
01654	Iron	7439-89-6	18,700	2.90	22.2		1
01656	Lithium	7439-93-2	18.9	0.69	2.2		1
01657	Magnesium	7439-95-4	3,550	0.489	11.1		1
06958	Manganese	7439-96-5	168	0.0400	0.555		1
10145	Phosphorus	7723-14-0	96.4	0.389	11.1		1
01662	Potassium	7440-09-7	1,560	12.4	55.0		1
01667	Sodium	7440-23-5	145	6.54	110		1
07968	Strontium	7440-24-6	16.4	0.0278	0.555		1
06969	Tin	7440-31-5	2.92 J	0.355	11.1		1
06970	Titanium	7440-32-6	1,080	0.0788	1.11		1
10146	Zirconium	7440-67-7	1.23 J	0.511	5.55		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.161 J	0.0830	0.224		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.31	0.0897	0.449		2
06126	Barium	7440-39-3	74.3	0.119	0.449		2
06127	Beryllium	7440-41-7	1.07	0.0179	0.112		2
06128	Cadmium	7440-43-9	0.0493 U	0.0493	0.112		2
06131	Chromium	7440-47-3	15.3	0.135	0.449		2
06132	Cobalt	7440-48-4	5.76	0.0224	0.112		2
06133	Copper	7440-50-8	6.28	0.0897	0.449		2
06135	Lead	7439-92-1	7.77	0.0114	0.224		2
06138	Molybdenum	7439-98-7	0.773	0.0561	0.112		2
06139	Nickel	7440-02-0	7.43	0.112	0.449		2
06141	Selenium	7782-49-2	0.114 J	0.0650	0.449		2
06142	Silver	7440-22-4	0.0453 J	0.0159	0.112		2
06145	Thallium	7440-28-0	0.270	0.0336	0.112		2
06148	Vanadium	7440-62-2	38.3	0.0247	0.112		2
06149	Zinc	7440-66-6	59.2	0.628	3.36		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0078 U	0.0078	0.111		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1	0.91	1.1		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	34.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA3-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-9.0-10.0

LLI Sample # SW 6438619
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6902 SDG#: DE269-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.1	mg/kg	1
SW-846 9045C modified							
00394	17a pH by 9045C	n.a.	6.65	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	Moisture Content by 160.3	n.a.	11.7	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11291SLD026	10/21/2011 07:06	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11291SLE026	10/21/2011 14:38	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11291SLE026	10/18/2011 21:35	Karen L Beyer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11291SLD026	10/18/2011 21:35	Karen L Beyer	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/21/2011 12:08	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 10:56	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 10:56	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 03:09	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA3-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-9.0-10.0

LLI Sample # SW 6438619
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:47

CDM Federal Programs Corp.

Submitted: 10/15/2011 09:45

14420 Albemarle Point Place

Reported: 11/09/2011 11:09

Suite 210

Chantilly VA 20151

E6902 SDG#: DE269-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 07:57	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 07:57	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 07:57	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 07:57	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 09:57	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201A	10/27/2011 12:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201B	10/20/2011 15:59	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11292243201A	10/20/2011 17:28	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201A	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201B	10/20/2011 06:30	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402A	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-036-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438620
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6903 SDG#: DE269-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1

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Sample Description: SL-036-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438620
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6903 SDG#: DE269-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76 U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38 U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76 U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76 U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76 U	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76 U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76 U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8 U	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	6.8 U	6.8	20		1
10138	Chrysene	218-01-9	0.38 U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.8 U	6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8 U	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.3 J	6.8	20		1
10138	Fluoranthene	206-44-0	0.76 U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76 U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8 U	6.8	20		1
10138	Phenanthrene	85-01-8	0.76 U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76 U	0.76	1.9		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.45 U	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	27,200	6.73	22.2		1
07914	Boron	7440-42-8	0.400 U	0.400	5.56		1
01650	Calcium	7440-70-2	7,650	2.78	22.2		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-036-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438620
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6903 SDG#: DE269-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	33,700	5.81	44.5		2
01656	Lithium	7439-93-2	32.7	0.69	2.2		1
01657	Magnesium	7439-95-4	8,690	0.489	11.1		1
06958	Manganese	7439-96-5	352	0.0400	0.556		1
10145	Phosphorus	7723-14-0	635	0.389	11.1		1
01662	Potassium	7440-09-7	3,350	12.7	56.2		1
01667	Sodium	7440-23-5	166	6.68	112		1
07968	Strontium	7440-24-6	59.3	0.0278	0.556		1
06969	Tin	7440-31-5	2.64 J	0.356	11.1		1
06970	Titanium	7440-32-6	1,650	0.0790	1.11		1
10146	Zirconium	7440-67-7	8.51	0.512	5.56		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.276	0.0831	0.225		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.4	0.0898	0.449		2
06126	Barium	7440-39-3	112	0.119	0.449		2
06127	Beryllium	7440-41-7	1.04	0.0180	0.112		2
06128	Cadmium	7440-43-9	0.0551 J	0.0494	0.112		2
06131	Chromium	7440-47-3	28.3	0.135	0.449		2
06132	Cobalt	7440-48-4	13.0	0.0225	0.112		2
06133	Copper	7440-50-8	32.6	0.0898	0.449		2
06135	Lead	7439-92-1	17.3	0.0115	0.225		2
06138	Molybdenum	7439-98-7	0.376	0.0562	0.112		2
06139	Nickel	7440-02-0	20.8	0.112	0.449		2
06141	Selenium	7782-49-2	0.110 J	0.0651	0.449		2
06142	Silver	7440-22-4	0.0159 U	0.0159	0.112		2
06145	Thallium	7440-28-0	0.451	0.0337	0.112		2
06148	Vanadium	7440-62-2	74.7	0.0247	0.112		2
06149	Zinc	7440-66-6	101	0.629	3.37		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0194 J	0.0079	0.112		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.3	0.93	1.2		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.4		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.2		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-036-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438620
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6903 SDG#: DE269-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	8.39	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	12.7	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11291SLD026	10/21/2011 07:31	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11291SLE026	10/21/2011 15:11	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11291SLE026	10/18/2011 21:35	Karen L Beyer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11291SLD026	10/18/2011 21:35	Karen L Beyer	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113010003A	11/02/2011 04:44	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	2	113010003A	10/28/2011 18:15	Sally L Appleyard	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 20:13	John P Hook	2
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 11:00	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 11:00	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 03:13	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 08:00	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-036-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438620
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6903 SDG#: DE269-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 08:00	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 08:00	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 08:00	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 09:58	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201A	10/27/2011 12:31	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201B	10/20/2011 16:22	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11292243201A	10/20/2011 17:43	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201A	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201B	10/20/2011 06:30	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402A	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-036-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438621
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6904 SDG#: DE269-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-036-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438621
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6904 SDG#: DE269-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76 U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38 U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76 U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76 U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76 U	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76 U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76 U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9 U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9 U	6.9	21		1
10138	Chrysene	218-01-9	0.38 U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9 U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9 U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9 U	6.9	21		1
10138	Fluoranthene	206-44-0	0.76 U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76 U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76 U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76 U	0.76	1.9		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	0.45 U	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside of the method required holding time, and surrogate recoveries are within the QC

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-036-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438621
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6904 SDG#: DE269-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
acceptance limits. Since the hold time had expired prior to the second extraction all results are reported from the original extract. Similar results were obtained in both extracts.							
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both trials with the exception of:							
Metals SW-846 6010B							
01643	Aluminum	7429-90-5	31,400	6.69	22.1		1
07914	Boron	7440-42-8	0.398 U	0.398	5.53		1
01650	Calcium	7440-70-2	18,600	2.77	22.1		1
01654	Iron	7439-89-6	32,600	5.78	44.3		2
01656	Lithium	7439-93-2	30.9	0.69	2.2		1
01657	Magnesium	7439-95-4	6,960	0.487	11.1		1
06958	Manganese	7439-96-5	366	0.0398	0.553		1
10145	Phosphorus	7723-14-0	192	0.387	11.1		1
01662	Potassium	7440-09-7	3,050	12.7	56.4		1
01667	Sodium	7440-23-5	130	6.71	113		1
07968	Strontium	7440-24-6	51.6	0.0277	0.553		1
06969	Tin	7440-31-5	2.81 J	0.354	11.1		1
06970	Titanium	7440-32-6	1,650	0.0786	1.11		1
10146	Zirconium	7440-67-7	5.63	0.509	5.53		1
SW-846 6020							
06124	Antimony	7440-36-0	0.201 J	0.0835	0.226		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.22	0.0903	0.451		2
06126	Barium	7440-39-3	150	0.120	0.451		2
06127	Beryllium	7440-41-7	0.929	0.0181	0.113		2
06128	Cadmium	7440-43-9	0.172	0.0496	0.113		2
06131	Chromium	7440-47-3	36.9	0.135	0.451		2
06132	Cobalt	7440-48-4	13.4	0.0226	0.113		2
06133	Copper	7440-50-8	16.7	0.0903	0.451		2
06135	Lead	7439-92-1	10.6	0.0115	0.226		2
06138	Molybdenum	7439-98-7	0.517	0.0564	0.113		2
06139	Nickel	7440-02-0	20.5	0.113	0.451		2
06141	Selenium	7782-49-2	0.175 J	0.0654	0.451		2
06142	Silver	7440-22-4	0.0257 J	0.0160	0.113		2
06145	Thallium	7440-28-0	0.398	0.0338	0.113		2
06148	Vanadium	7440-62-2	77.1	0.0248	0.113		2
06149	Zinc	7440-66-6	77.1	0.632	3.38		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-036-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438621
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6904 SDG#: DE269-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
00159	Mercury	7439-97-6	0.0077 U	0.0077	0.109	mg/kg	1
Wet Chemistry							
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.9	0.93	1.2	mg/kg	1
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.5	ug/kg	1
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1	mg/kg	1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	8.39	0.0100	0.0100		1
Wet Chemistry							
11624	Moisture Content by 160.3	n.a.	13.1	0.50	0.50	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11291SLD026	10/21/2011 07:56	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11291SLE026	10/21/2011 15:43	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11291SLE026	10/18/2011 21:35	Karen L Beyer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11291SLD026	10/18/2011 21:35	Karen L Beyer	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	112910025A	10/21/2011 12:46	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	112910025A	10/19/2011 12:00	Olivia I Santiago	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 20:17	John P Hook	2
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-036-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438621
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6904 SDG#: DE269-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 11:04	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 11:04	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 03:17	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 08:03	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 08:03	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 08:03	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 08:03	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 10:03	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201A	10/27/2011 12:46	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201B	10/20/2011 16:45	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11292243201A	10/20/2011 17:57	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201A	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201B	10/20/2011 06:30	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402A	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-037-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438622
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6905 SDG#: DE269-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1

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Sample Description: SL-037-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438622
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6905 SDG#: DE269-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76 U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38 U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76 U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76 U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76 U	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76 U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76 U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8 U	6.8	21		1
10138	Di-n-butylphthalate	84-74-2	6.8 U	6.8	21		1
10138	Chrysene	218-01-9	0.38 U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.8 U	6.8	21		1
10138	Dimethylphthalate	131-11-3	6.8 U	6.8	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.8 U	6.8	21		1
10138	Fluoranthene	206-44-0	0.76 U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76 U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8 U	6.8	21		1
10138	Phenanthrene	85-01-8	0.76 U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76 U	0.76	1.9		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	0.45 U	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	36,300	6.89	22.8		1
07914	Boron	7440-42-8	5.93	0.410	5.70		1
01650	Calcium	7440-70-2	14,200	2.85	22.8		1

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Sample Description: SL-037-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438622
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6905 SDG#: DE269-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	35,200	5.95	45.6		2
01656	Lithium	7439-93-2	31.4	0.71	2.3		1
01657	Magnesium	7439-95-4	8,110	0.501	11.4		1
06958	Manganese	7439-96-5	468	0.0410	0.570		1
10145	Phosphorus	7723-14-0	152	0.399	11.4		1
01662	Potassium	7440-09-7	3,700	12.7	56.4		1
01667	Sodium	7440-23-5	166	6.71	113		1
07968	Strontium	7440-24-6	66.2	0.0285	0.570		1
06969	Tin	7440-31-5	2.87 J	0.365	11.4		1
06970	Titanium	7440-32-6	1,620	0.0809	1.14		1
10146	Zirconium	7440-67-7	4.87 J	0.524	5.70		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.308	0.0835	0.226		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.69	0.0903	0.451		2
06126	Barium	7440-39-3	179	0.120	0.451		2
06127	Beryllium	7440-41-7	1.01	0.0181	0.113		2
06128	Cadmium	7440-43-9	0.155	0.0496	0.113		2
06131	Chromium	7440-47-3	38.9	0.135	0.451		2
06132	Cobalt	7440-48-4	12.8	0.0226	0.113		2
06133	Copper	7440-50-8	17.2	0.0903	0.451		2
06135	Lead	7439-92-1	11.3	0.0115	0.226		2
06138	Molybdenum	7439-98-7	0.524	0.0564	0.113		2
06139	Nickel	7440-02-0	23.4	0.113	0.451		2
06141	Selenium	7782-49-2	0.142 J	0.0654	0.451		2
06142	Silver	7440-22-4	0.0479 J	0.0160	0.113		2
06145	Thallium	7440-28-0	0.482	0.0338	0.113		2
06148	Vanadium	7440-62-2	77.7	0.0248	0.113		2
06149	Zinc	7440-66-6	84.3	0.632	3.38		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0079 U	0.0079	0.112		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.7	0.92	1.2		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.5		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.31 J	0.23	1.2		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-037-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438622
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6905 SDG#: DE269-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	8.29	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	13.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11291SLD026	10/21/2011 08:21	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11291SLE026	10/22/2011 00:11	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11291SLE026	10/18/2011 21:35	Karen L Beyer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11291SLD026	10/18/2011 21:35	Karen L Beyer	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113010003A	11/02/2011 05:02	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	2	113010003A	10/28/2011 18:15	Sally L Appleyard	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 03:21	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 20:29	John P Hook	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 03:21	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 20:33	John P Hook	2
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 03:21	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 03:21	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 03:21	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 03:21	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 11:07	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 11:07	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 03:21	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 03:21	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 03:21	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 03:21	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 08:06	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-037-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438622
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6905 SDG#: DE269-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 08:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 08:06	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 08:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 10:04	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201A	10/27/2011 13:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201B	10/20/2011 17:08	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11292243201A	10/20/2011 18:19	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201A	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201B	10/20/2011 06:30	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402A	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-037-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438623
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6906 SDG#: DE269-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	190		1
04688	4-Chloroaniline	106-47-8	78	U 78	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	390	U 390	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	27	J 19	390		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	78	U 78	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	39	U 39	190		1
04688	4-Methylphenol	106-44-5	39	U 39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	39	U 39	190		1
04688	4-Nitroaniline	100-01-6	78	U 78	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	580		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-037-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438623
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6906 SDG#: DE269-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.79	U 0.79	2.0		1
10138	Acenaphthylene	208-96-8	0.39	U 0.39	2.0		1
10138	Anthracene	120-12-7	0.39	U 0.39	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.79	U 0.79	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.79	U 0.79	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.79	U 0.79	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.79	U 0.79	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.79	U 0.79	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.1	U 7.1	21		1
10138	Di-n-butylphthalate	84-74-2	7.1	U 7.1	21		1
10138	Chrysene	218-01-9	0.39	U 0.39	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.79	U 0.79	2.0		1
10138	Diethylphthalate	84-66-2	7.1	U 7.1	21		1
10138	Dimethylphthalate	131-11-3	7.1	U 7.1	21		1
10138	Fluoranthene	206-44-0	0.79	U 0.79	2.0		1
10138	Fluorene	86-73-7	0.79	U 0.79	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.79	U 0.79	2.0		1
10138	1-Methylnaphthalene	90-12-0	0.79	U 0.79	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.79	U 0.79	2.0		1
10138	Naphthalene	91-20-3	0.79	U 0.79	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.79	U 0.79	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.1	U 7.1	21		1
10138	Phenanthrene	85-01-8	0.79	U 0.79	2.0		1
10138	Pyrene	129-00-0	0.79	U 0.79	2.0		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2	U 1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2	U 1.2	3.9		1
10225	Aroclor 5460	11126-42-4	1.2	U 1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39	U 0.39	2.0		1
10225	PCB-1221	11104-28-2	0.39	U 0.39	2.0		1
10225	PCB-1232	11141-16-5	0.39	U 0.39	2.0		1
10225	PCB-1242	53469-21-9	0.39	U 0.39	2.0		1
10225	PCB-1248	12672-29-6	0.39	U 0.39	2.0		1
10225	PCB-1254	11097-69-1	0.39	U 0.39	2.0		1
10225	PCB-1260	11096-82-5	0.46	U 0.46	2.0		1
10225	PCB-1262	37324-23-5	0.39	U 0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39	U 0.39	2.0		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	40,000	6.94	23.0		1
07914	Boron	7440-42-8	7.06	0.413	5.74		1
01650	Calcium	7440-70-2	8,540	2.87	23.0		1

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Sample Description: SL-037-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438623
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6906 SDG#: DE269-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals			mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	40,800	5.99	45.9		2
01656	Lithium	7439-93-2	37.5	0.71	2.3		1
01657	Magnesium	7439-95-4	10,200	0.505	11.5		1
06958	Manganese	7439-96-5	277	0.0413	0.574		1
10145	Phosphorus	7723-14-0	240	0.402	11.5		1
01662	Potassium	7440-09-7	4,230	13.0	57.4		1
01667	Sodium	7440-23-5	240	6.83	115		1
07968	Strontium	7440-24-6	65.8	0.0287	0.574		1
06969	Tin	7440-31-5	3.17 J	0.367	11.5		1
06970	Titanium	7440-32-6	1,570	0.0815	1.15		1
10146	Zirconium	7440-67-7	4.87 J	0.528	5.74		1
SW-846 6010B			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.378	0.0858	0.232		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.96	0.0927	0.464		2
06126	Barium	7440-39-3	199	0.123	0.464		2
06127	Beryllium	7440-41-7	1.27	0.0185	0.116		2
06128	Cadmium	7440-43-9	0.0708 J	0.0510	0.116		2
06131	Chromium	7440-47-3	47.6	0.139	0.464		2
06132	Cobalt	7440-48-4	17.6	0.0232	0.116		2
06133	Copper	7440-50-8	25.8	0.0927	0.464		2
06135	Lead	7439-92-1	13.9	0.0118	0.232		2
06138	Molybdenum	7439-98-7	0.872	0.0579	0.116		2
06139	Nickel	7440-02-0	30.5	0.116	0.464		2
06141	Selenium	7782-49-2	0.172 J	0.0672	0.464		2
06142	Silver	7440-22-4	0.0232 J	0.0165	0.116		2
06145	Thallium	7440-28-0	0.594	0.0348	0.116		2
06148	Vanadium	7440-62-2	96.5	0.0255	0.116		2
06149	Zinc	7440-66-6	109	0.649	3.48		2
SW-846 7471A			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0079 U	0.0079	0.112		1
Wet Chemistry			mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	11.8	0.96	1.2		1
EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.6 U	10.6	35.5		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.24 U	0.24	1.2		1
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	Std. Units	

*=This limit was used in the evaluation of the final result

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Sample Description: SL-037-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438623
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6906 SDG#: DE269-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	8.30	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	15.4	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11291SLD026	10/21/2011 08:47	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11291SLE026	10/22/2011 00:44	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11291SLE026	10/18/2011 21:35	Karen L Beyer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11291SLD026	10/18/2011 21:35	Karen L Beyer	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113010003A	11/02/2011 05:21	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	2	113010003A	10/28/2011 18:15	Sally L Appleyard	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 03:27	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 20:37	John P Hook	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 03:27	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 20:42	John P Hook	2
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 03:27	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 03:27	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 03:27	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 03:27	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 11:11	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 11:11	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 03:27	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 03:27	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 03:27	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 03:27	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 08:09	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-037-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438623
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6906 SDG#: DE269-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 08:09	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 08:09	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 08:09	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 10:05	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201A	10/27/2011 13:47	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201B	10/20/2011 17:54	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11292243201A	10/20/2011 18:26	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201A	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201B	10/20/2011 06:30	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402A	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-038-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438624
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6907 SDG#: DE269-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	72	U 72	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	360	U 360	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	72	U 72	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1

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Sample Description: SL-038-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438624
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6907 SDG#: DE269-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72 U	0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36 U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.72 U	0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.72 U	0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.72 U	0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.72 U	0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.72 U	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4 U	6.4	19		1
10138	Chrysene	218-01-9	0.36 U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.1 J	6.4	19		1
10138	Fluoranthene	206-44-0	0.72 U	0.72	1.8		1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72 U	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19		1
10138	Phenanthrene	85-01-8	0.72 U	0.72	1.8		1
10138	Pyrene	129-00-0	0.72 U	0.72	1.8		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36 U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36 U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36 U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43 U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	23,200	6.48	21.4		1
07914	Boron	7440-42-8	0.385 U	0.385	5.35		1
01650	Calcium	7440-70-2	34,600	2.68	21.4		1

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 5

Sample Description: SL-038-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438624
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6907 SDG#: DE269-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	27,200	2.79	21.4		1
01656	Lithium	7439-93-2	28.9	0.66	2.1		1
01657	Magnesium	7439-95-4	6,980	0.471	10.7		1
06958	Manganese	7439-96-5	328	0.0385	0.535		1
10145	Phosphorus	7723-14-0	573	0.375	10.7		1
01662	Potassium	7440-09-7	3,760	12.2	54.0		1
01667	Sodium	7440-23-5	135	6.43	108		1
07968	Strontium	7440-24-6	60.3	0.0268	0.535		1
06969	Tin	7440-31-5	2.50 J	0.342	10.7		1
06970	Titanium	7440-32-6	1,300	0.0760	1.07		1
10146	Zirconium	7440-67-7	4.26 J	0.492	5.35		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.188 J	0.0808	0.218		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.74	0.0873	0.437		2
06126	Barium	7440-39-3	116	0.116	0.437		2
06127	Beryllium	7440-41-7	0.688	0.0175	0.109		2
06128	Cadmium	7440-43-9	0.194	0.0480	0.109		2
06131	Chromium	7440-47-3	33.6	0.131	0.437		2
06132	Cobalt	7440-48-4	10.6	0.0218	0.109		2
06133	Copper	7440-50-8	13.1	0.0873	0.437		2
06135	Lead	7439-92-1	8.01	0.0111	0.218		2
06138	Molybdenum	7439-98-7	0.443	0.0546	0.109		2
06139	Nickel	7440-02-0	17.9	0.109	0.437		2
06141	Selenium	7782-49-2	0.199 J	0.0633	0.437		2
06142	Silver	7440-22-4	0.0220 J	0.0155	0.109		2
06145	Thallium	7440-28-0	0.305	0.0328	0.109		2
06148	Vanadium	7440-62-2	65.0	0.0240	0.109		2
06149	Zinc	7440-66-6	68.8	0.611	3.28		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0074 U	0.0074	0.105		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.6	0.87	1.1		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.8		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.24 J	0.22	1.1		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	

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Sample Description: SL-038-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438624
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6907 SDG#: DE269-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	8.42	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	8.4	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11291SLD026	10/21/2011 09:12	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11291SLE026	10/22/2011 01:17	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11291SLE026	10/18/2011 21:35	Karen L Beyer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11291SLD026	10/18/2011 21:35	Karen L Beyer	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113010003A	11/02/2011 05:40	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	2	113010003A	10/28/2011 18:15	Sally L Appleyard	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 11:15	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 11:15	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 03:31	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 08:18	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-038-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438624
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6907 SDG#: DE269-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 08:18	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 08:18	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 08:18	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 10:06	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201A	10/27/2011 14:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201B	10/20/2011 18:17	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11292243201A	10/20/2011 18:48	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201A	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201B	10/20/2011 06:30	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402B	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-038-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438625
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6908 SDG#: DE269-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	72	U 72	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	360	U 360	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	72	U 72	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-038-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438625
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6908 SDG#: DE269-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U 0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.72	U 0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.72	U 0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U 0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U 0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.72	U 0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	19		1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	19		1
10138	Chrysene	218-01-9	0.36	U 0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U 0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U 6.5	19		1
10138	Dimethylphthalate	131-11-3	6.5	U 6.5	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.0	J 6.5	19		1
10138	Fluoranthene	206-44-0	0.72	U 0.72	1.8		1
10138	Fluorene	86-73-7	0.72	U 0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U 0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72	U 0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72	U 0.72	1.8		1
10138	Naphthalene	91-20-3	0.72	U 0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U 0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U 6.5	19		1
10138	Phenanthrene	85-01-8	0.72	U 0.72	1.8		1
10138	Pyrene	129-00-0	0.72	U 0.72	1.8		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U 1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U 1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U 1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U 0.36	1.8		1
10225	PCB-1221	11104-28-2	0.36	U 0.36	1.8		1
10225	PCB-1232	11141-16-5	0.36	U 0.36	1.8		1
10225	PCB-1242	53469-21-9	0.36	U 0.36	1.8		1
10225	PCB-1248	12672-29-6	0.36	U 0.36	1.8		1
10225	PCB-1254	11097-69-1	0.36	U 0.36	1.8		1
10225	PCB-1260	11096-82-5	0.42	U 0.42	1.8		1
10225	PCB-1262	37324-23-5	0.36	U 0.36	1.8		1
10225	PCB-1268	11100-14-4	0.36	U 0.36	1.8		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	23,500	6.46	21.4		1
07914	Boron	7440-42-8	0.385	U 0.385	5.34		1
01650	Calcium	7440-70-2	7,550	2.67	21.4		1

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Sample Description: SL-038-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438625
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6908 SDG#: DE269-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals			mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	27,100	2.79	21.4		1
01656	Lithium	7439-93-2	23.3	0.66	2.1		1
01657	Magnesium	7439-95-4	5,830	0.470	10.7		1
06958	Manganese	7439-96-5	363	0.0385	0.534		1
10145	Phosphorus	7723-14-0	440	0.374	10.7		1
01662	Potassium	7440-09-7	2,800	11.8	52.4		1
01667	Sodium	7440-23-5	120	6.23	105		1
07968	Strontium	7440-24-6	38.0	0.0267	0.534		1
06969	Tin	7440-31-5	2.73 J	0.342	10.7		1
06970	Titanium	7440-32-6	1,340	0.0758	1.07		1
10146	Zirconium	7440-67-7	6.16	0.491	5.34		1
SW-846 6010B			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.221	0.0775	0.209		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.82	0.0838	0.419		2
06126	Barium	7440-39-3	117	0.111	0.419		2
06127	Beryllium	7440-41-7	0.794	0.0168	0.105		2
06128	Cadmium	7440-43-9	0.146	0.0461	0.105		2
06131	Chromium	7440-47-3	40.4	0.126	0.419		2
06132	Cobalt	7440-48-4	10.0	0.0209	0.105		2
06133	Copper	7440-50-8	10.6	0.0838	0.419		2
06135	Lead	7439-92-1	8.06	0.0107	0.209		2
06138	Molybdenum	7439-98-7	0.530	0.0524	0.105		2
06139	Nickel	7440-02-0	18.8	0.105	0.419		2
06141	Selenium	7782-49-2	0.122 J	0.0607	0.419		2
06142	Silver	7440-22-4	0.0413 J	0.0149	0.105		2
06145	Thallium	7440-28-0	0.303	0.0314	0.105		2
06148	Vanadium	7440-62-2	72.6	0.0230	0.105		2
06149	Zinc	7440-66-6	64.9	0.587	3.14		2
SW-846 7471A			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0073 U	0.0073	0.104		1
Wet Chemistry			mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9	0.86	1.1		1
EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.4		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 J	0.21	1.1		1
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	Std. Units	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-038-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438625
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6908 SDG#: DE269-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	8.41	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	7.3	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11291SLD026	10/21/2011 09:37	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11291SLE026	10/22/2011 01:50	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11291SLE026	10/18/2011 21:35	Karen L Beyer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11291SLD026	10/18/2011 21:35	Karen L Beyer	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113010003A	11/02/2011 05:59	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	2	113010003A	10/28/2011 18:15	Sally L Appleyard	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 11:19	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 11:19	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 03:36	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 08:21	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-038-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438625
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6908 SDG#: DE269-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 08:21	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 08:21	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 08:21	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 10:08	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201A	10/27/2011 14:17	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201B	10/20/2011 18:40	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11292243201A	10/20/2011 19:02	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201A	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201B	10/20/2011 06:30	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402B	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438626
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6909 SDG#: DE269-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	16.9 U	16.9	33.8		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	510		1
04688	Benizidine	92-87-5	1,200	U 1,200	3,400		1
04688	Benzoic acid	65-85-0	170	U 170	510		1
04688	Benzyl alcohol	100-51-6	170	U 170	510		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170		1
04688	4-Chloroaniline	106-47-8	68	U 68	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170		1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	510		1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	68	U 68	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	510		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	34	U 34	170		1
04688	4-Methylphenol	106-44-5	34	U 34	170		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	34	U 34	170		1
04688	4-Nitroaniline	100-01-6	68	U 68	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	510		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1

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Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438626
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6909 SDG#: DE269-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U 170	510		1
04688	Phenol	108-95-2	17	J 17	170		1
04688	Tetralin	119-64-2	170	U 170	170		1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170		1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.68	U 0.68	1.7		1
10138	Acenaphthylene	208-96-8	0.34	U 0.34	1.7		1
10138	Anthracene	120-12-7	0.34	U 0.34	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.68	U 0.68	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.77	J 0.68	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	1.5	J 0.68	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	0.68	U 0.68	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	4.3	U 0.68	1.7		1
10138	Butylbenzylphthalate	85-68-7	19	6.1	18		1
10138	Di-n-butylphthalate	84-74-2	6.1	U 6.1	18		1
10138	Chrysene	218-01-9	1.3	J 0.34	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.68	U 0.68	1.7		1
10138	Diethylphthalate	84-66-2	6.1	U 6.1	18		1
10138	Dimethylphthalate	131-11-3	6.1	U 6.1	18		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	75	6.1	18		1
10138	Fluoranthene	206-44-0	2.1	0.68	1.7		1
10138	Fluorene	86-73-7	0.68	U 0.68	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.68	U 0.68	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.68	U 0.68	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.68	U 0.68	1.7		1
10138	Naphthalene	91-20-3	0.68	U 0.68	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.68	U 0.68	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.1	U 6.1	18		1
10138	Phenanthrene	85-01-8	0.97	J 0.68	1.7		1
10138	Pyrene	129-00-0	1.6	J 0.68	1.7		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	60	U 60	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	40	U 40	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	80	U 80	240	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	80	U 80	240	1000000 0	1

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Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438626
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6909 SDG#: DE269-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3-Dinitrobenzene	99-65-0	40 U	40	120	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	40 U	40	120	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	40 U	40	120	10000000	1
10132	HMX	2691-41-0	100 U	100	300	10000000	1
10132	Nitrobenzene	98-95-3	40 U	40	120	10000000	1
10132	Nitroglycerin	55-63-0	800 U	800	2,400	10000000	1
10132	2-Nitrotoluene	88-72-2	80 U	80	120	10000000	1
10132	3-Nitrotoluene	99-08-1	100 U	100	120	10000000	1
10132	4-Nitrotoluene	99-99-0	80 U	80	120	10000000	1
10132	PETN	78-11-5	800 U	800	2,400	10000000	1
10132	RDX	121-82-4	50 U	50	120	10000000	1
10132	Tetryl	479-45-8	61 U	61	120	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	40 U	40	120	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	40 U	40	120	10000000	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	610 U	610	1,500		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4		1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4		1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4		1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.7		1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.7		1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.7		1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.7		1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.7		1
10225	PCB-1254	11097-69-1	0.80 J	0.34	1.7		1
10225	PCB-1260	11096-82-5	0.40 U	0.40	1.7		1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.7		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.7		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	510		1
10501	Isopropanol	67-63-0	100 U	100	510		1

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Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438626
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

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Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6909 SDG#: DE269-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC Miscellaneous		SW-846 8015B	ug/kg		ug/kg	ug/kg	ug/kg	
10501	Methanol	67-56-1	100	U	100	510		1
GC Miscellaneous		SW-846 8015B modified	mg/kg		mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.1	U	5.1	10		1
08283	Ethylene glycol	107-21-1	5.1	U	5.1	10		1
08283	Propylene glycol	57-55-6	5.1	U	5.1	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.5	U	1.5	3.6		1
10318	o-Terphenyl	84-15-1	1.5	U	1.5	3.6		1
10318	p-Terphenyl	92-94-4	1.5	U	1.5	3.6		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg		mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.41	U	0.41	1.2		1
10199	EFH (C15-C20)	n.a.	2.9		0.41	1.2		1
10199	EFH (C21-C30)	n.a.	19		0.41	1.2		1
10199	EFH (C30 - C40)	n.a.	28		0.41	1.2		1
10199	EFH (C8-C11)	n.a.	1.6		0.41	1.2		1
Metals		SW-846 6010B	mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,600		6.06	20.0		1
07914	Boron	7440-42-8	0.361	U	0.361	5.01		1
01650	Calcium	7440-70-2	3,260		2.50	20.0		1
01654	Iron	7439-89-6	21,200		2.61	20.0		1
01656	Lithium	7439-93-2	20.9		0.62	2.0		1
01657	Magnesium	7439-95-4	5,890		0.441	10.0		1
06958	Manganese	7439-96-5	293		0.0361	0.501		1
10145	Phosphorus	7723-14-0	376		0.350	10.0		1
01662	Potassium	7440-09-7	1,980		11.5	51.1		1
01667	Sodium	7440-23-5	73.0	J	6.08	102		1
07968	Strontium	7440-24-6	14.1		0.0250	0.501		1
06969	Tin	7440-31-5	2.45	J	0.320	10.0		1
06970	Titanium	7440-32-6	1,170		0.0711	1.00		1
10146	Zirconium	7440-67-7	0.552	J	0.461	5.01		1
		SW-846 6020	mg/kg		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.117	J	0.0741	0.200		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.								
06125	Arsenic	7440-38-2	4.58		0.0801	0.401		2
06126	Barium	7440-39-3	88.2		0.106	0.401		2
06127	Beryllium	7440-41-7	0.573		0.0160	0.100		2
06128	Cadmium	7440-43-9	0.0866	J	0.0441	0.100		2

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Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438626
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6909 SDG#: DE269-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals			mg/kg	mg/kg	mg/kg	mg/kg	
06131	Chromium	7440-47-3	22.4	0.120	0.401		2
06132	Cobalt	7440-48-4	6.94	0.0200	0.100		2
06133	Copper	7440-50-8	10.1	0.0801	0.401		2
06135	Lead	7439-92-1	5.70	0.0102	0.200		2
06138	Molybdenum	7439-98-7	0.478	0.0501	0.100		2
06139	Nickel	7440-02-0	16.0	0.100	0.401		2
06141	Selenium	7782-49-2	0.201 J	0.0581	0.401		2
06142	Silver	7440-22-4	0.0314 J	0.0142	0.100		2
06145	Thallium	7440-28-0	0.249	0.0300	0.100		2
06148	Vanadium	7440-62-2	41.3	0.0220	0.100		2
06149	Zinc	7440-66-6	62.3	0.561	3.00		2
SW-846 6020			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0107 J	0.0070	0.0992		1
Wet Chemistry			mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7	0.81	1.0		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	3.5	0.81	1.5		1
EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.2 U	9.2	30.6		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.27 J	0.20	1.0		1
SW-846 9012B			mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.18 U	0.18	0.51		1
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.47	0.0100	0.0100		1
Wet Chemistry			EPA 160.3 modified	%	%	%	
11624	Moisture Content by 160.3	n.a.	2.1	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438626
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6909 SDG#: DE269-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11291SLG026	11/02/2011 01:36	Matthew S Woods	1
04688	5a SVOCs with Tetralin 8270C	SW-846 8270C	1	11291SLD026	10/21/2011 10:02	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11291SLE026	10/22/2011 02:23	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11291SLG026	10/19/2011 06:50	Katheryne V Sponheimer	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11291SLE026	10/18/2011 21:35	Karen L Beyer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11291SLD026	10/18/2011 21:35	Karen L Beyer	1
10132	15a Energetics by 8330A	SW-846 8330A	1	112880015A	10/21/2011 10:19	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	112910003A	10/19/2011 22:25	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113010003A	11/02/2011 06:18	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	2	113010003A	10/28/2011 18:15	Sally L Appleyard	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	112910003A	10/18/2011 16:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	112880015A	10/17/2011 17:00	Kelli M Barto	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	112900028A	10/18/2011 22:51	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	112980042A	10/25/2011 23:29	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	112920028A	10/21/2011 21:15	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	112920027A	10/21/2011 06:26	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	112920027A	10/20/2011 12:00	Olivia I Santiago	1
10303	Terphenyls soil prep	SW-846 3550B	1	112920028A	10/20/2011 12:00	Olivia I Santiago	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	112900028A	10/18/2011 17:00	Elizabeth J Marin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	112980042A	10/25/2011 18:25	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	112905708002	10/25/2011 20:46	John P Hook	1
01650	Calcium	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	112985708002	10/26/2011 11:22	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	112985708002	10/26/2011 11:22	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	112905708002	10/25/2011 03:47	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06126	Barium	SW-846 6020	1	112901026001D	10/18/2011 08:24	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438626
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6909 SDG#: DE269-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06135	Lead	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	112901026001C	10/18/2011 08:24	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	112901026001B	10/18/2011 08:24	Choon Y Tian	2
06142	Silver	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	112901026001A	10/18/2011 08:24	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	112905711002	10/18/2011 10:09	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	112905708002	10/17/2011 22:40	Annamaria Stipkovits	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	112985708002	10/25/2011 22:27	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	112901026001	10/17/2011 22:42	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	112905711002	10/18/2011 02:05	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11299621201B	10/27/2011 15:18	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11299621201B	10/27/2011 15:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11293621201B	10/20/2011 19:04	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11292243201A	10/20/2011 19:09	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11293102201B	10/21/2011 08:16	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11299621201B	10/26/2011 06:30	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11293621201B	10/20/2011 06:30	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11293102201B	10/20/2011 15:35	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11299039402B	10/26/2011 15:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11292243201A	10/19/2011 09:50	Michelle L Lalli	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 1 of 1

Sample Description: EB-SA3-SB-101411 Water
SSFL Area IV Collocated Soil Sampling
EB-SA3-SB-101411

LLI Sample # WW 6438627
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6910 SDG#: DE269-10EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	EPA 1625C		ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	1.20	0.492	0.984		1
N-Nitrosodimethylamine was detected in the method blank at a concentration of 1.33 ng/l. The blank value was not subtracted from the analytical result. Sufficient sample was unavailable to repeat the analysis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11290WAA026	11/01/2011 18:19	Matthew S Woods	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11290WAA026	10/17/2011 13:55	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 1 of 1

Sample Description: TB-101411 Water
SSFL Area IV Collocated Soil Sampling
TB-101411

LLI Sample # WW 6438628
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6911 SDG#: DE269-11TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	EPA 1625C		ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	3.99	0.533	1.07		1
N-Nitrosodimethylamine was detected in the method blank at a concentration of 1.33 ng/l. The blank value was not subtracted from the analytical result. Sufficient sample was unavailable to repeat the analysis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11290WAA026	11/01/2011 18:38	Matthew S Woods	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11290WAA026	10/17/2011 13:55	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 1 of 1

Sample Description: TB-101411 Sand
SSFL Area IV Collocated Soil Sampling
TB-101411

LLI Sample # SW 6438629
LLI Group # 1271484
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 11/09/2011 11:09

E6912 SDG#: DE269-12TB*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	16.7 U	16.7	33.3		1
Wet Chemistry	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	0.50 U	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11291SLG026	11/02/2011 01:55	Matthew S Woods	1
11630	NDMA Soil Microwave	SW-846 3546	1	11291SLG026	10/19/2011 06:50	Katheryne V Sponheimer	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11290WAA026 N-Nitrosodimethylamine	Sample number(s): 6438627-6438628 1.33	0.500	1.00	ng/l	101	107	70-130	6	30
Batch number: 11291SLD026 Aniline	Sample number(s): 6438618-6438626 170 U	170.	500	ug/kg	68		20-115		
Benzidine	1,200 U	1,200.	3,300	ug/kg	57		15-121		
Benzoic acid	170 U	170.	500	ug/kg	65		62-113		
Benzyl alcohol	170 U	170.	500	ug/kg	91		68-111		
4-Bromophenyl-phenylether	17 U	17.	170	ug/kg	101		73-114		
Carbazole	17 U	17.	170	ug/kg	99		77-113		
4-Chloro-3-methylphenol	33 U	33.	170	ug/kg	97		74-119		
4-Chloroaniline	67 U	67.	170	ug/kg	47		10-110		
bis(2-Chloroethoxy)methane	17 U	17.	170	ug/kg	94		70-118		
bis(2-Chloroethyl)ether	17 U	17.	170	ug/kg	90		70-104		
bis(2-Chloroisopropyl)ether	17 U	17.	170	ug/kg	91		62-115		
2-Chloronaphthalene	17 U	17.	170	ug/kg	94		49-128		
2-Chlorophenol	17 U	17.	170	ug/kg	96		72-112		
4-Chlorophenyl-phenylether	33 U	33.	170	ug/kg	97		74-115		
Dibenzofuran	17 U	17.	170	ug/kg	94		74-116		
1,2-Dichlorobenzene	17 U	17.	170	ug/kg	89		74-99		
1,3-Dichlorobenzene	17 U	17.	170	ug/kg	89		70-98		
1,4-Dichlorobenzene	17 U	17.	170	ug/kg	89		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	43		10-116		
2,4-Dichlorophenol	17 U	17.	170	ug/kg	99		75-111		
2,4-Dimethylphenol	33 U	33.	170	ug/kg	97		72-111		
3,5-Dimethylphenol	33 U	33.	170	ug/kg	119		83-120		
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	47		46-120		
2,4-Dinitrophenol	330 U	330.	1,000	ug/kg	26		18-133		
2,4-Dinitrotoluene	33 U	33.	170	ug/kg	96		73-115		
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	101		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	102		71-125		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	97		75-117		
Hexachlorobenzene	17 U	17.	170	ug/kg	99		73-119		
Hexachlorobutadiene	67 U	67.	170	ug/kg	97		65-117		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	86		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	87		61-109		
Isophorone	17 U	17.	170	ug/kg	94		69-110		
2-Methylphenol	33 U	33.	170	ug/kg	95		66-110		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
4-Methylphenol	33 U	33.	170	ug/kg	90		66-117		
2-Nitroaniline	17 U	17.	170	ug/kg	95		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	93		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	72		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	94		66-119		
2-Nitrophenol	17 U	17.	170	ug/kg	95		76-111		
4-Nitrophenol	170 U	170.	500	ug/kg	91		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	86		63-107		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	101		67-141		
Pentachlorophenol	170 U	170.	500	ug/kg	85		51-117		
Phenol	17 U	17.	170	ug/kg	95		58-112		
Tetralin	170 U	170.	170	ug/kg					
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	93		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	96		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	99		78-111		
Batch number: 11291SLE026 Sample number(s): 6438618-6438626									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	94		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	91		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	96		73-113		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	99		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	95		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	96		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	105		66-150		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	99		54-142		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	87		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	92		75-137		
Chrysene	0.33 U	0.33	1.7	ug/kg	103		73-114		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	107		53-138		
Diethylphthalate	6.0 U	6.0	18	ug/kg	93		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	96		79-121		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	106		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	102		64-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	101		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	105		56-134		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	89		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	88		62-120		
Naphthalene	0.67 U	0.67	1.7	ug/kg	91		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	102		55-118		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	98		68-162		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	94		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	89		72-119		
Batch number: 11291SLG026 Sample number(s): 6438626, 6438629									
N-Nitrosodimethylamine	16.7 U	16.7	33.3	ng/kg	105		70-130		
Batch number: 112880015A Sample number(s): 6438626									
4-Amino-2,6-Dinitrotoluene	60 U	60.	120	ug/kg	109		80-120		
2-Amino-4,6-Dinitrotoluene	40 U	40.	120	ug/kg	106		80-120		
2,6-Diamino-4-nitrotoluene	80 U	80.	240	ug/kg	87	90	54-134	4	30
2,4-Diamino-6-nitrotoluene	80 U	80.	240	ug/kg	86	90	54-134	4	30
1,3-Dinitrobenzene	40 U	40.	120	ug/kg	110		51-171		
2,4-Dinitrotoluene	40 U	40.	120	ug/kg	101		72-135		
2,6-Dinitrotoluene	40 U	40.	120	ug/kg	106		80-120		
HMX	100	100.	300	ug/kg	93		74-130		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Nitrobenzene	40 U	40.	120	ug/kg	106		80-120		
Nitroglycerin	800 U	800.	2,400	ug/kg	90		80-120		
2-Nitrotoluene	80 U	80.	120	ug/kg	101		78-128		
3-Nitrotoluene	100 U	100.	120	ug/kg	108		73-127		
4-Nitrotoluene	80 U	80.	120	ug/kg	101		80-120		
PETN	800 U	800.	2,400	ug/kg	104		80-120		
RDX	50 U	50.	120	ug/kg	102		75-131		
Tetryl	61 U	61.	120	ug/kg	96		70-168		
1,3,5-Trinitrobenzene	40 U	40.	120	ug/kg	104		77-137		
2,4,6-Trinitrotoluene	40 U	40.	120	ug/kg	108		80-120		
Batch number: 112910003A	Sample number(s): 6438626								
20a Formaldehyde 8315A	600 U	600.	1,500	ug/kg	91		80-126		
Batch number: 112910025A	Sample number(s): 6438618-6438619, 6438621								
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	69	66	36-106	4	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	67*		72-120		
PCB-1221	0.33 U	0.33	1.7	ug/kg					
PCB-1232	0.33 U	0.33	1.7	ug/kg					
PCB-1242	0.33 U	0.33	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.39 U	0.39	1.7	ug/kg	85		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 113010003A	Sample number(s): 6438620, 6438622-6438626								
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	70	68	36-106	3	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	80		72-120		
PCB-1221	0.33 U	0.33	1.7	ug/kg					
PCB-1232	0.33 U	0.33	1.7	ug/kg					
PCB-1242	0.33 U	0.33	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.39 U	0.39	1.7	ug/kg	95		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 112900028A	Sample number(s): 6438626								
Ethanol	100 U	100.	500	ug/kg	89		71-129		
Isopropanol	100 U	100.	500	ug/kg	86		75-125		
Methanol	100 U	100.	500	ug/kg	90		68-129		
Batch number: 112980042A	Sample number(s): 6438626								
Diethylene glycol	5.0 U	5.0	10	mg/kg	100		75-125		
Ethylene glycol	5.0 U	5.0	10	mg/kg	106		53-149		

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Propylene glycol	5.0 U	5.0	10	mg/kg	99		67-131		
Batch number: 112920027A	Sample number(s): 6438626								
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	94		70-123		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	96		75-128		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	97		64-134		
EFH (C30 - C40)	0.40 U	0.40	1.2	mg/kg	85		65-128		
EFH (C8-C11)	0.40 U	0.40	1.2	mg/kg	83		49-107		
Batch number: 112920028A	Sample number(s): 6438626								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	100		64-111		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	105		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	98		69-109		
Batch number: 112901026001A	Sample number(s): 6438618-6438626								
Antimony	0.0740 U	0.0740	0.200	mg/kg	134		40-227		
Arsenic	0.0800 U	0.0800	0.400	mg/kg	101		83-111		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	102		84-112		
Cadmium	0.0440 U	0.0440	0.100	mg/kg	105		83-111		
Chromium	0.120 U	0.120	0.400	mg/kg	111		77-123		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	108		85-114		
Copper	0.0800 U	0.0800	0.400	mg/kg	104		81-110		
Lead	0.0102 U	0.0102	0.200	mg/kg	104		84-112		
Nickel	0.100 U	0.100	0.400	mg/kg	104		81-110		
Silver	0.0142 U	0.0142	0.100	mg/kg	102		83-112		
Thallium	0.0300 U	0.0300	0.100	mg/kg	103		82-112		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	103		76-110		
Zinc	0.560 U	0.560	3.00	mg/kg	101		82-110		
Batch number: 112901026001B	Sample number(s): 6438618-6438626								
Selenium	0.0580 U	0.0580	0.400	mg/kg	102		79-110		
Batch number: 112901026001C	Sample number(s): 6438618-6438626								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	105		80-110		
Batch number: 112901026001D	Sample number(s): 6438618-6438626								
Barium	0.106 U	0.106	0.400	mg/kg	102		83-110		
Batch number: 112905708002	Sample number(s): 6438618-6438626								
Aluminum	6.05 U	6.05	20.0	mg/kg	99		40-127		
Boron	0.360 U	0.360	5.00	mg/kg	103		83-110		
Calcium	6.41 J	2.50	20.0	mg/kg	106		81-110		
Iron	2.61 U	2.61	20.0	mg/kg	101		47-129		
Lithium	0.62 U	0.62	2.0	mg/kg	102		80-120		
Magnesium	0.440 U	0.440	10.0	mg/kg	102		63-116		
Manganese	0.0360 U	0.0360	0.500	mg/kg	104		85-116		
Phosphorus	1.73 J	0.350	10.0	mg/kg	107		80-120		
Strontium	0.0510 J	0.0250	0.500	mg/kg	107		84-110		
Tin	1.44 J	0.320	10.0	mg/kg	104		86-120		
Titanium	0.0710 U	0.0710	1.00	mg/kg	93		80-120		
Zirconium	0.460 U	0.460	5.00	mg/kg	104		80-120		
Batch number: 112905711002	Sample number(s): 6438618-6438626								
Mercury	0.0070 U	0.0070	0.100	mg/kg	105		83-119		
Batch number: 112985708002	Sample number(s): 6438618-6438626								
Potassium	11.3 U	11.3	50.0	mg/kg	100		71-110		
Sodium	5.95 U	5.95	100	mg/kg	101		76-110		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11292243201A 3a Cr VI by EPA 7199	Sample number(s): 6438618-6438626 0.20 U 0.20	1.0	mg/kg	81			80-120		
Batch number: 11293102201B 16a Cyanide by 9012B	Sample number(s): 6438626 0.18 U 0.18	0.50	mg/kg	85			80-120		
Batch number: 11293621201B 7a Perchlorate EPA 314.0	Sample number(s): 6438618-6438626 9.0 U 9.0	30.0	ug/kg	108			85-115		
Batch number: 11299621201A 11a Anions by 300.0 - Fluoride	Sample number(s): 6438618-6438625 0.80 U 0.80	1.0	mg/kg	104			90-110		
Batch number: 11299621201B 11a Anions by 300.0 - Fluoride	Sample number(s): 6438626 0.80 U 0.80	1.0	mg/kg	104			90-110		
Batch number: 11299621201B 11a Anions by 300.0 - Nitrate	0.80 U 0.80	1.5	mg/kg	106			90-110		
Batch number: 11299039402A 17a pH by 9045C	Sample number(s): 6438618-6438623			100			95-105		
Batch number: 11299039402B 17a pH by 9045C	Sample number(s): 6438624-6438626			100			95-105		
Batch number: 11298162402A Moisture Content by 160.3	Sample number(s): 6438618-6438626, 6438629			100			80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11291SLD026	Sample number(s): 6438618-6438626 UNSPK: P439922								
Aniline	71	71	18-116	0	30				
Benzidine	46	46	35-141	1	30				
Benzoic acid	58	26	10-173	75*	30				
Benzyl alcohol	94	96	67-115	3	30				
4-Bromophenyl-phenylether	100	100	67-129	1	30				
Carbazole	98	97	64-120	0	30				
4-Chloro-3-methylphenol	99	98	62-122	0	30				
4-Chloroaniline	57	64	13-107	13	30				
bis(2-Chloroethoxy)methane	95	96	75-104	2	30				
bis(2-Chloroethyl)ether	90	92	60-116	2	30				
bis(2-Chloroisopropyl)ether	91	91	55-142	1	30				
2-Chloronaphthalene	67	93	50-141	34*	30				
2-Chlorophenol	97	99	73-121	3	30				
4-Chlorophenyl-phenylether	99	99	80-109	1	30				
Dibenzofuran	95	95	71-112	1	30				
1,2-Dichlorobenzene	88	88	66-108	1	30				
1,3-Dichlorobenzene	88	88	63-109	0	30				
1,4-Dichlorobenzene	88	88	58-108	1	30				
3,3'-Dichlorobenzidine	47	52	28-109	11	30				
2,4-Dichlorophenol	102	101	66-123	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2,4-Dimethylphenol	99	98	68-118	0	30				
3,5-Dimethylphenol	111	118	71-127	8	30				
4,6-Dinitro-2-methylphenol	63	18	11-126	112*	30				
2,4-Dinitrophenol	33	12*	20-143	93*	30				
2,4-Dinitrotoluene	98	98	56-129	1	30				
2,6-Dinitrotoluene	101	102	69-123	2	30				
1,2-Diphenylhydrazine	100	100	71-129	1	30				
bis(2-Ethylhexyl)phthalate	98	97	63-122	1	30				
Hexachlorobenzene	98	98	77-114	1	30				
Hexachlorobutadiene	95	96	62-120	2	30				
Hexachlorocyclopentadiene	80	80	10-153	2	30				
Hexachloroethane	87	85	57-109	1	30				
Isophorone	95	95	73-102	1	30				
2-Methylphenol	97	98	75-111	2	30				
4-Methylphenol	93	94	59-123	2	30				
2-Nitroaniline	99	100	67-125	2	30				
3-Nitroaniline	95	95	59-122	1	30				
4-Nitroaniline	76	75	41-109	0	30				
Nitrobenzene	94	95	57-125	2	30				
2-Nitrophenol	95	96	56-127	2	30				
4-Nitrophenol	93	89	37-129	3	30				
N-Nitroso-di-n-propylamine	87	88	60-116	2	30				
N-Nitrosodiphenylamine	101	100	71-122	0	30				
Pentachlorophenol	89	64	28-127	32*	30				
Phenol	94	98	58-126	5	30				
1,2,4-Trichlorobenzene	93	94	72-115	2	30				
2,4,5-Trichlorophenol	100	99	58-129	0	30				
2,4,6-Trichlorophenol	99	99	56-134	1	30				

Batch number: 11291SLE026 Sample number(s): 6438618-6438626 UNSPK: 6438618

Acenaphthene	99	97	63-105	3	30
Acenaphthylene	93	93	67-114	0	30
Anthracene	100	100	73-115	1	30
Benzo(a)anthracene	105	103	59-128	2	30
Benzo(a)pyrene	97	96	58-142	0	30
Benzo(b)fluoranthene	102	103	54-163	1	30
Benzo(g,h,i)perylene	110	64	33-141	53*	30
Benzo(k)fluoranthene	97	102	57-153	4	30
Butylbenzylphthalate	100	97	57-173	3	30
Di-n-butylphthalate	97	94	65-148	3	30
Chrysene	107	105	67-123	2	30
Dibenz(a,h)anthracene	112	74	22-133	41*	30
Diethylphthalate	96	95	70-136	1	30
Dimethylphthalate	101	102	74-118	0	30
Bis(2-Ethylhexyl)phthalate	110	110	39-167	0	30
Fluoranthene	109	106	51-149	3	30
Fluorene	101	101	66-122	1	30
Indeno(1,2,3-cd)pyrene	110	69	21-143	47*	30
1-Methylnaphthalene	89	91	72-123	1	30
2-Methylnaphthalene	89	90	64-103	1	30
Naphthalene	90	92	61-102	1	30
N-Nitrosodimethylamine	105	105	48-113	0	30
Di-n-octylphthalate	90	87	40-192	4	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Phenanthrene	98	96	62-122	2	30				
Pyrene	93	90	51-131	4	30				
Batch number: 11291SLG026	Sample number(s): 6438626, 6438629 UNSPK: P437195								
N-Nitrosodimethylamine	97	95	70-130	2	30				
Batch number: 112880015A	Sample number(s): 6438626 UNSPK: P437195								
4-Amino-2,6-Dinitrotoluene	107	110	80-127	3	50				
2-Amino-4,6-Dinitrotoluene	104	107	80-137	2	50				
1,3-Dinitrobenzene	108	110	38-166	2	50				
2,4-Dinitrotoluene	98	102	80-131	3	50				
2,6-Dinitrotoluene	104	108	80-127	3	50				
HMX	92	93	63-128	1	50				
Nitrobenzene	102	105	80-125	4	50				
Nitroglycerin	99	99	80-120	0	50				
2-Nitrotoluene	99	103	80-122	4	50				
3-Nitrotoluene	105	109	72-119	3	50				
4-Nitrotoluene	99	102	80-125	3	50				
PETN	106	108	80-121	2	50				
RDX	98	99	75-129	1	50				
Tetryl	89	86	55-174	4	50				
1,3,5-Trinitrobenzene	99	101	82-126	2	50				
2,4,6-Trinitrotoluene	104	107	82-130	3	50				
Batch number: 112910003A	Sample number(s): 6438626 UNSPK: P437195								
20a Formaldehyde 8315A	98	104	80-120	6	50				
Batch number: 112910025A	Sample number(s): 6438618-6438619, 6438621 UNSPK: P437195								
PCB-1016	65	65	29-146	0	50				
PCB-1260	79	84	39-149	7	50				
Batch number: 113010003A	Sample number(s): 6438620, 6438622-6438626 UNSPK: P437195								
PCB-1016	80	81	29-146	1	50				
PCB-1260	86	87	39-149	1	50				
Batch number: 112900028A	Sample number(s): 6438626 UNSPK: P437195								
Ethanol	75	73	48-130	2	20				
Isopropanol	72	71	12-149	1	20				
Methanol	75	72	43-138	3	20				
Batch number: 112980042A	Sample number(s): 6438626 UNSPK: P437195								
Diethylene glycol	47*	48*	59-109	3	20				
Ethylene glycol	75	75	63-107	1	20				
Propylene glycol	77	78	63-107	0	20				
Batch number: 112920027A	Sample number(s): 6438626 UNSPK: P437195								
EFH (C12-C14)	82	89	49-123	8	20				
EFH (C15-C20)	81	98	49-123	13	20				
EFH (C21-C30)	102	117	49-123	7	20				
EFH (C30 - C40)	110	138*	49-123	8	20				
EFH (C8-C11)	0*	5*	49-123	10	20				
Batch number: 112920028A	Sample number(s): 6438626 UNSPK: P437195								

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
m-Terphenyl	97	98	75-125	2	20				
o-Terphenyl	102	103	75-125	1	20				
p-Terphenyl	95	97	75-125	2	20				
Batch number: 112901026001A	Sample number(s): 6438618-6438626 UNSPK: P437195 BKG: P437195								
Antimony	39*	43*	75-125	8	20	0.135 J	0.126 J	7 (1)	20
Arsenic	101	108	75-125	3	20	3.78	3.79	0	20
Beryllium	91	102	75-125	8	20	0.484	0.538	11 (1)	20
Cadmium	111	108	75-125	2	20	0.0714 J	0.0880 J	21* (1)	20
Chromium	95	120	75-125	9	20	17.3	20.5	17	20
Cobalt	105	108	75-125	3	20	5.76	6.25	8	20
Copper	107	116	75-125	5	20	8.35	10.0	18	20
Lead	119	146*	75-125	10	20	4.54	5.21	14	20
Nickel	112	117	75-125	3	20	11.5	13.8	18	20
Silver	103	110	75-125	7	20	0.0337 J	0.0284 J	17 (1)	20
Thallium	104	122	75-125	11	20	0.244	0.284	15 (1)	20
Vanadium	99	137*	75-125	8	20	34.2	40.9	18	20
Zinc	111 (2)	145 (2)	75-125	5	20	55.0	64.0	15	20
Batch number: 112901026001B	Sample number(s): 6438618-6438626 UNSPK: P437195 BKG: P437195								
Selenium	103	118	75-125	13	20	0.162 J	0.153 J	6 (1)	20
Batch number: 112901026001C	Sample number(s): 6438618-6438626 UNSPK: P437195 BKG: P437195								
Molybdenum	104	111	75-125	7	20	0.266	0.289	8 (1)	20
Batch number: 112901026001D	Sample number(s): 6438618-6438626 UNSPK: P437195 BKG: P437195								
Barium	138 (2)	141 (2)	75-125	0	20	85.0	93.7	10	20
Batch number: 112905708002	Sample number(s): 6438618-6438626 UNSPK: P437195 BKG: P437195								
Aluminum	2054 (2)	1557 (2)	75-125	6	20	12,500	12,700	2	20
Boron	103	102	84-115	0	20	1.03 J	0.806 J	25* (1)	20
Calcium	156 (2)	118 (2)	75-125	4	20	3,410	3,450	1	20
Iron	2305 (2)	15740 (2)	75-125	45*	20	20,200	20,700	2	20
Lithium	101	98	82-114	2	20	27.6	28.3	3	20
Magnesium	398 (2)	211 (2)	75-125	5	20	6,060	6,060	0	20
Manganese	45 (2)	74 (2)	75-125	4	20	299	276	8	20
Phosphorus	86 (2)	91 (2)	75-125	1	20	435	405	7	20
Strontium	100	98	75-115	1	20	12.6	12.1	4	20
Tin	90	89	80-110	0	20	2.61 J	2.45 J	6 (1)	20
Titanium	307 (2)	281 (2)	75-125	2	20	1,210	1,180	2	20
Zirconium	97	97	81-110	1	20	0.897 J	1.34 J	40* (1)	20
Batch number: 112905711002	Sample number(s): 6438618-6438626 UNSPK: P437195 BKG: P437195								
Mercury	101	99	65-135	4	20	0.0068 J	0.0069 U	200* (1)	20
Batch number: 112985708002	Sample number(s): 6438618-6438626 UNSPK: P437195 BKG: P437195								
Potassium	128*	119	75-125	3	20	2,360	2,410	2	20
Sodium	99	97	75-125	4	20	118	115	3 (1)	20
Batch number: 11292243201A	Sample number(s): 6438618-6438626 UNSPK: P437195 BKG: P437195								
3a Cr VI by EPA 7199	89		75-125			0.20 U	1.3	200* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11293102201B 16a Cyanide by 9012B	Sample number(s): 6438626 99		75-125	UNSPK: P437195		BKG: P437195 0.18 U	0.18 U	0 (1)	20
Batch number: 11293621201B 7a Perchlorate EPA 314.0	Sample number(s): 6438618-6438626 109		80-120	UNSPK: 6438618		BKG: 6438618 9.0 U	9.0 U	0 (1)	15
Batch number: 11299621201A 11a Anions by 300.0 - Fluoride	Sample number(s): 6438618-6438625 38*		80-120	UNSPK: P435696		BKG: P435696 1.5	1.5	2 (1)	20
Batch number: 11299621201B 11a Anions by 300.0 - Fluoride	Sample number(s): 6438626 62*		80-120	UNSPK: P439922		BKG: P439922 4.3	4.4	1 (1)	20
11a Anions by 300.0 - Nitrate	102		80-120			1.3 J	1.4 J	6 (1)	20
Batch number: 11299039402A 17a pH by 9045C	Sample number(s): 6438618-6438623 8.55			BKG: P435690		8.53		0	3
Batch number: 11299039402B 17a pH by 9045C	Sample number(s): 6438624-6438626 7.86			BKG: P437195		7.90		1	3
Batch number: 11298162402A Moisture Content by 160.3	Sample number(s): 6438618-6438626, 6438629 15.4			BKG: 6438623		15.6		1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21b. NDMA in Water
Batch number: 11290WAA026
N-Nitrosodimethylamine-
d6

6438627	117
6438628	149
Blank	102
LCS	101
LCSD	98

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 11291SLD026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6438618	86	92	80	87	87	84
6438619	89	94	82	91	90	84
6438620	85	90	77	86	83	85
6438621	87	92	70	87	84	82
6438622	82	87	70	83	81	82

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** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

Surrogate Quality Control

6438623	86	91	69	87	84	85
6438624	89	96	72	90	89	86
6438625	90	96	62	87	88	87
6438626	93	96	79	88	89	84
Blank	88	93	84	88	88	84
LCS	89	93	86	88	90	83
MS	91	94	89	89	90	82
MSD	91	95	86	89	89	83

Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11291SLE026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6438618	108	92	89
6438619	104	90	88
6438620	101	87	86
6438621	97	83	82
6438622	105	90	96
6438623	105	88	96
6438624	103	90	95
6438625	111	94	97
6438626	114	87	86
Blank	103	89	91
LCS	107	92	84
MS	107	91	87
MSD	109	92	85

Limits:	40-130	45-130	45-135

Analysis Name: 21a NDMA by 1625C
Batch number: 11291SLG026

N-Nitrosodimethylamine-d6

6438626	86
6438629	87
Blank	124
LCS	120
MS	94
MSD	77

Limits:	50-150

Analysis Name: 15a Energetics by 8330A
Batch number: 112880015A

2-Nitro-m-xylene

6438626	131
Blank	125
LCS	114
LCSD	113
MS	108
MSD	113

Limits:	80-146

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

Surrogate Quality Control

Analysis Name: 20a Formaldehyde 8315A
Batch number: 112910003A
Butyraldehyde

6438626	81
Blank	87
LCS	86
MS	80
MSD	84

Limits: 64-126

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 112910025A
Tetrachloro-m-xylene Decachlorobiphenyl

6438618	79	93
6438619	63	77
6438621	52*	61
Blank	82	93
LCS	73	89
LCSD	76	99
MS	74	84
MSD	61	89

Limits: 53-139 45-120

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 113010003A
Tetrachloro-m-xylene Decachlorobiphenyl

6438620	81	89
6438622	80	85
6438623	83	90
6438624	79	92
6438625	88	91
6438626	87	86
Blank	81	94
LCS	84	95
LCSD	90	96
MS	88	86
MSD	90	86

Limits: 53-139 45-120

Analysis Name: 18a Alcohols by 8015B
Batch number: 112900028A
Acetone

6438626	40*
Blank	83
LCS	82
MS	69
MSD	66

Limits: 42-138

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/09/11 at 11:09 AM

Group Number: 1271484

Surrogate Quality Control

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 112920027A

	Chlorobenzene	Orthoterphenyl
6438626	72	80
Blank	82	88
LCS	88	92
MS	77	86
MSD	80	90

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B
Batch number: 112920028A
n-Triacontane-d62

6438626	198*
Blank	80
LCS	79
MS	79
MSD	79

Limits: 19-152

Analysis Name: 19a Glycols by 8015B
Batch number: 112980042A
Tetramethylene glycol

6438626	82
Blank	100
LCS	99
MS	88
MSD	87

Limits: 29-137

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

acct #13013 Cp #1271484

sample # 6433618-29

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes	
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetraclin under EPA Method 8270C.		SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 8010/8270B&7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCB&PCTs EPA 8062	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex. Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	TPH-GRO EPA 8015B \$	**TPH-EFH EPA 8015B Mod	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1623C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B		**Downal EPA 8270
		SL-006-SA3-SB-4.0-5.0	10.13.11	1529	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X													Sampled 10.13.11
		SL-006-SA3-SB-9.0-10.0	10.13.11	1447	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X													Sampled 10.13.11
		SL-036-SA5DS-SB-4.0-5.0	10.14.11	1138	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X													
		SL-036-SA5DS-SB-9.0-10.0	10.14.11	1134	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X													
		SL-037-SA5DS-SB-4.0-5.0	10.14.11	0947	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X													
		SL-037-SA5DS-SB-9.0-10.0	10.14.11	0905	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X													
		SL-038-SA5DS-SB-4.0-5.0	10.14.11	1100	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X													
		SL-038-SA5DS-SB-9.0-10.0	10.14.11	1027	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X													
		SL-164-SA7-SB-0.5-1.5	10.14.11	1420	SOIL	NONE	1-SS Sleeve			X	X																	
		SL-164-SA7-SB-0.5-1.5	10.14.11	1420	SOIL	NONE	2-16 oz Jars	X	X			X	X	X	X			X	X	X	X	X	X	X	X	X		
		EB-SA3-SB-101411	10.14.11	1400	WATER	NONE	1-1 L Amber													X								HGL ASTM II WATER-HA crew
		TB-101411	10.14.11	0800	WATER	NONE	1-1 L Amber													X								
		TB-101411	10.14.11	0800	SOIL	NONE	1-4 oz Jar													X								
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																								Laboratory:
		10/13/2011 / 1630																										Lancaster Laboratories, Inc.
Received by: (Signature)		Date/Time		Airbill No.(s)																								
Bevely		10-15-11 10:18		8767 9858 6806, 6817																								

Bevely

0945
JH 10/15/11
(3)

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

October 30, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/15/2011

Group Number: 1271486

SDG: DX149

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-006-SA3-SB-4.0-5.0 Soil
SL-006-SA3-SB-9.0-10.0 Soil
SL-036-SA5DS-SB-4.0-5.0 Soil
SL-036-SA5DS-SB-9.0-10.0 Soil
SL-037-SA5DS-SB-4.0-5.0 Soil
SL-037-SA5DS-SB-9.0-10.0 Soil
SL-038-SA5DS-SB-4.0-5.0 Soil
SL-038-SA5DS-SB-9.0-10.0 Soil
SL-164-SA7-SB-0.5-1.5 SoilLancaster Labs (LLI) #6438634
6438635
6438636
6438637
6438638
6438639
6438640
6438641
6438642

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program

COPY TO

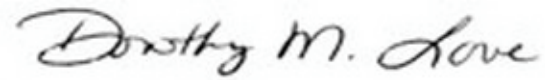
ELECTRONIC Data Package Group

COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Dorothy M. Love
Group Leader



Analysis Report

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Page 1 of 4

Sample Description: SL-006-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-4.0-5.0

LLI Sample # SW 6438634
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 15:29

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4906 SDG#: DX149-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	9.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-006-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-4.0-5.0

LLI Sample # SW 6438634
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 15:29

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4906 SDG#: DX149-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0466 U	0.0466	1.09	1
11031	12378-PeCDD	40321-76-4	0.0450 JBQ	0.0386	5.43	1
11031	123478-HxCDD	39227-28-6	0.0633 JBQ	0.0279	5.43	1
11031	123678-HxCDD	57653-85-7	0.0516 JQ	0.0289	5.43	1
11031	123789-HxCDD	19408-74-3	0.0621 JBQ	0.0298	5.43	1
11031	1234678-HpCDD	35822-46-9	0.276 JB	0.0305	5.43	1
11031	OCDD	3268-87-9	0.641 JBQ	0.0312	10.9	1
11031	2378-TCDF	51207-31-9	0.0372 JQ	0.0286	1.09	1
11031	12378-PeCDF	57117-41-6	0.0445 JBQ	0.0186	5.43	1
11031	23478-PeCDF	57117-31-4	0.0526 JB	0.0175	5.43	1
11031	123478-HxCDF	70648-26-9	0.0431 JBQ	0.0155	5.43	1
11031	123678-HxCDF	57117-44-9	0.0193 JBQ	0.0143	5.43	1
11031	123789-HxCDF	72918-21-9	0.0157 U	0.0157	5.43	1
11031	234678-HxCDF	60851-34-5	0.0589 JBQ	0.0136	5.43	1
11031	1234678-HpCDF	67562-39-4	0.176 JB	0.0142	5.43	1
11031	1234789-HpCDF	55673-89-7	0.0370 JBQ	0.0186	5.43	1
11031	OCDF	39001-02-0	0.158 JB	0.0408	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	92	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	93	23 - 140
13C12-OCDD	103	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	86	26 - 138
13C12-OCDF	91	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present



Analysis Report

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Page 3 of 4

Sample Description: SL-006-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-4.0-5.0

LLI Sample # SW 6438634
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 15:29

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4906 SDG#: DX149-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

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Sample Description: SL-006-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-4.0-5.0

LLI Sample # SW 6438634
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 15:29

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4906 SDG#: DX149-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/24/2011 22:20	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-006-SA3-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-9.0-10.0

LLI Sample # SW 6438635
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4907 SDG#: DX149-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	11.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-006-SA3-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-9.0-10.0

LLI Sample # SW 6438635
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4907 SDG#: DX149-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.115 JQ	0.0525	1.13	1
11031	12378-PeCDD	40321-76-4	0.0438 U	0.0438	5.64	1
11031	123478-HxCDD	39227-28-6	0.0297 U	0.0297	5.64	1
11031	123678-HxCDD	57653-85-7	0.0545 JQ	0.0307	5.64	1
11031	123789-HxCDD	19408-74-3	0.0856 JBQ	0.0291	5.64	1
11031	1234678-HpCDD	35822-46-9	0.342 JBQ	0.0307	5.64	1
11031	OCDD	3268-87-9	0.910 JB	0.0262	11.3	1
11031	2378-TCDF	51207-31-9	0.0364 U	0.0364	1.13	1
11031	12378-PeCDF	57117-41-6	0.123 JBQ	0.0223	5.64	1
11031	23478-PeCDF	57117-31-4	0.118 JBQ	0.0197	5.64	1
11031	123478-HxCDF	70648-26-9	0.126 JBQ	0.0225	5.64	1
11031	123678-HxCDF	57117-44-9	0.0975 JBQ	0.0211	5.64	1
11031	123789-HxCDF	72918-21-9	0.0731 JBQ	0.0224	5.64	1
11031	234678-HxCDF	60851-34-5	0.0980 JB	0.0193	5.64	1
11031	1234678-HpCDF	67562-39-4	0.234 JB	0.0160	5.64	1
11031	1234789-HpCDF	55673-89-7	0.0545 JB	0.0203	5.64	1
11031	OCDF	39001-02-0	0.145 JB	0.0370	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	86	25 - 164
13C12-12378-PeCDD	94	25 - 181
13C12-123478-HxCDD	98	32 - 141
13C12-123678-HxCDD	99	28 - 130
13C12-123789-HxCDD	99	28 - 130
13C12-1234678-HpCDD	109	23 - 140
13C12-OCDD	114	17 - 157
13C12-2378-TCDF	87	24 - 169
13C12-12378-PeCDF	94	24 - 185
13C12-23478-PeCDF	94	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	91	28 - 136
13C12-123789-HxCDF	98	29 - 147
13C12-1234678-HpCDF	103	28 - 143
13C12-1234789-HpCDF	96	26 - 138
13C12-OCDF	102	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present



Analysis Report

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Sample Description: SL-006-SA3-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-9.0-10.0

LLI Sample # SW 6438635
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4907 SDG#: DX149-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 4 of 4

Sample Description: SL-006-SA3-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA3-SB-9.0-10.0

LLI Sample # SW 6438635
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 14:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4907 SDG#: DX149-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/25/2011 02:19	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-036-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438636
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4908 SDG#: DX149-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	12.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-036-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438636
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4908 SDG#: DX149-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0632 JQ	0.0504	1.15	1
11031	12378-PeCDD	40321-76-4	0.391 JB	0.0450	5.73	1
11031	123478-HxCDD	39227-28-6	0.202 JBQ	0.0323	5.73	1
11031	123678-HxCDD	57653-85-7	0.197 JQ	0.0328	5.73	1
11031	123789-HxCDD	19408-74-3	0.158 JBQ	0.0322	5.73	1
11031	1234678-HpCDD	35822-46-9	0.366 JBQ	0.0346	5.73	1
11031	OCDD	3268-87-9	0.559 JBQ	0.0305	11.5	1
11031	2378-TCDF	51207-31-9	0.0811 J	0.0298	1.15	1
11031	12378-PeCDF	57117-41-6	0.479 JB	0.0230	5.73	1
11031	23478-PeCDF	57117-31-4	0.357 JB	0.0207	5.73	1
11031	123478-HxCDF	70648-26-9	0.241 JB	0.0243	5.73	1
11031	123678-HxCDF	57117-44-9	0.281 JBQ	0.0222	5.73	1
11031	123789-HxCDF	72918-21-9	0.184 JBQ	0.0235	5.73	1
11031	234678-HxCDF	60851-34-5	0.165 JBQ	0.0211	5.73	1
11031	1234678-HpCDF	67562-39-4	0.229 JBQ	0.0152	5.73	1
11031	1234789-HpCDF	55673-89-7	0.105 JBQ	0.0191	5.73	1
11031	OCDF	39001-02-0	0.200 JBQ	0.0389	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	86	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

Sample Description: SL-036-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438636
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4908 SDG#: DX149-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					



Analysis Report

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Sample Description: SL-036-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438636
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4908 SDG#: DX149-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/25/2011 03:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-036-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438637
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4909 SDG#: DX149-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	13.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-036-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438637
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4909 SDG#: DX149-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0518 U	0.0518	1.13	1
11031	12378-PeCDD	40321-76-4	0.182 JBQ	0.0440	5.64	1
11031	123478-HxCDD	39227-28-6	0.0897 JBQ	0.0364	5.64	1
11031	123678-HxCDD	57653-85-7	0.286 J	0.0369	5.64	1
11031	123789-HxCDD	19408-74-3	0.690 JBQ	0.0360	5.64	1
11031	1234678-HpCDD	35822-46-9	0.355 JBQ	0.0349	5.64	1
11031	OCDD	3268-87-9	0.628 JB	0.0335	11.3	1
11031	2378-TCDF	51207-31-9	0.0589 JQ	0.0349	1.13	1
11031	12378-PeCDF	57117-41-6	0.267 JB	0.0217	5.64	1
11031	23478-PeCDF	57117-31-4	0.168 JBQ	0.0209	5.64	1
11031	123478-HxCDF	70648-26-9	0.137 JBQ	0.0243	5.64	1
11031	123678-HxCDF	57117-44-9	0.166 JBQ	0.0217	5.64	1
11031	123789-HxCDF	72918-21-9	0.725 JBQ	0.0245	5.64	1
11031	234678-HxCDF	60851-34-5	0.114 JB	0.0204	5.64	1
11031	1234678-HpCDF	67562-39-4	0.165 JBQ	0.0167	5.64	1
11031	1234789-HpCDF	55673-89-7	0.0242 JBQ	0.0227	5.64	1
11031	OCDF	39001-02-0	0.112 JBQ	0.0453	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	81	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

Sample Description: SL-036-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438637
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4909 SDG#: DX149-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					



Analysis Report

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Page 4 of 4

Sample Description: SL-036-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438637
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4909 SDG#: DX149-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/25/2011 04:12	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-037-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438638
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4910 SDG#: DX149-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	13.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-037-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438638
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4910 SDG#: DX149-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.114 JQ	0.0563	1.15	1
11031	12378-PeCDD	40321-76-4	0.172 JBQ	0.0442	5.75	1
11031	123478-HxCDD	39227-28-6	0.0654 JBQ	0.0311	5.75	1
11031	123678-HxCDD	57653-85-7	0.239 J	0.0320	5.75	1
11031	123789-HxCDD	19408-74-3	0.488 JB	0.0343	5.75	1
11031	1234678-HpCDD	35822-46-9	0.294 JBQ	0.0338	5.75	1
11031	OCDD	3268-87-9	0.670 JB	0.0350	11.5	1
11031	2378-TCDF	51207-31-9	0.0416 J	0.0344	1.15	1
11031	12378-PeCDF	57117-41-6	0.301 JB	0.0224	5.75	1
11031	23478-PeCDF	57117-31-4	0.285 JBQ	0.0201	5.75	1
11031	123478-HxCDF	70648-26-9	0.136 JBQ	0.0264	5.75	1
11031	123678-HxCDF	57117-44-9	0.0902 JBQ	0.0235	5.75	1
11031	123789-HxCDF	72918-21-9	0.657 JB	0.0258	5.75	1
11031	234678-HxCDF	60851-34-5	0.0677 JBQ	0.0213	5.75	1
11031	1234678-HpCDF	67562-39-4	0.138 JBQ	0.0171	5.75	1
11031	1234789-HpCDF	55673-89-7	0.0546 JBQ	0.0234	5.75	1
11031	OCDF	39001-02-0	0.0767 JB	0.0428	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	79	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

Sample Description: SL-037-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438638
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4910 SDG#: DX149-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					



Analysis Report

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Sample Description: SL-037-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438638
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4910 SDG#: DX149-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/25/2011 05:09	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-037-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438639
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4911 SDG#: DX149-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	15.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-037-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438639
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4911 SDG#: DX149-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0526 U	0.0526	1.17	1
11031	12378-PeCDD	40321-76-4	0.0430 U	0.0430	5.83	1
11031	123478-HxCDD	39227-28-6	0.0314 JBQ	0.0287	5.83	1
11031	123678-HxCDD	57653-85-7	0.0299 U	0.0299	5.83	1
11031	123789-HxCDD	19408-74-3	0.0452 JBQ	0.0291	5.83	1
11031	1234678-HpCDD	35822-46-9	0.298 JB	0.0337	5.83	1
11031	OCDD	3268-87-9	0.585 JB	0.0303	11.7	1
11031	2378-TCDF	51207-31-9	0.0316 U	0.0316	1.17	1
11031	12378-PeCDF	57117-41-6	0.0215 JBQ	0.0202	5.83	1
11031	23478-PeCDF	57117-31-4	0.0579 JBQ	0.0196	5.83	1
11031	123478-HxCDF	70648-26-9	0.0300 JBQ	0.0187	5.83	1
11031	123678-HxCDF	57117-44-9	0.0294 JBQ	0.0165	5.83	1
11031	123789-HxCDF	72918-21-9	0.0584 JBQ	0.0184	5.83	1
11031	234678-HxCDF	60851-34-5	0.0283 JBQ	0.0150	5.83	1
11031	1234678-HpCDF	67562-39-4	0.0771 JB	0.0142	5.83	1
11031	1234789-HpCDF	55673-89-7	0.0336 JBQ	0.0215	5.83	1
11031	OCDF	39001-02-0	0.194 JB	0.0405	11.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present



Analysis Report

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Page 3 of 4

Sample Description: SL-037-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438639
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4911 SDG#: DX149-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-037-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-037-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438639
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 09:05

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/15/2011 09:45

Suite 210

Reported: 10/30/2011 16:19

Chantilly VA 20151

X4911 SDG#: DX149-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/25/2011 06:05	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-038-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438640
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4912 SDG#: DX149-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	8.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-038-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438640
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4912 SDG#: DX149-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0444 U	0.0444	1.08	1
11031	12378-PeCDD	40321-76-4	0.0398 U	0.0398	5.38	1
11031	123478-HxCDD	39227-28-6	0.0436 JBQ	0.0246	5.38	1
11031	123678-HxCDD	57653-85-7	0.0241 U	0.0241	5.38	1
11031	123789-HxCDD	19408-74-3	0.101 JBQ	0.0236	5.38	1
11031	1234678-HpCDD	35822-46-9	0.268 JBQ	0.0314	5.38	1
11031	OCDD	3268-87-9	0.914 JB	0.0271	10.8	1
11031	2378-TCDF	51207-31-9	0.0293 U	0.0293	1.08	1
11031	12378-PeCDF	57117-41-6	0.0523 JBQ	0.0175	5.38	1
11031	23478-PeCDF	57117-31-4	0.0392 JBQ	0.0174	5.38	1
11031	123478-HxCDF	70648-26-9	0.0182 U	0.0182	5.38	1
11031	123678-HxCDF	57117-44-9	0.0179 JBQ	0.0169	5.38	1
11031	123789-HxCDF	72918-21-9	0.120 JBQ	0.0167	5.38	1
11031	234678-HxCDF	60851-34-5	0.0146 U	0.0146	5.38	1
11031	1234678-HpCDF	67562-39-4	0.0996 JBQ	0.0140	5.38	1
11031	1234789-HpCDF	55673-89-7	0.0575 JBQ	0.0205	5.38	1
11031	OCDF	39001-02-0	0.217 JBQ	0.0406	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	89	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	99	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	85	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present



Analysis Report

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Sample Description: SL-038-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438640
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4912 SDG#: DX149-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-038-SA5DS-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-4.0-5.0

LLI Sample # SW 6438640
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4912 SDG#: DX149-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/25/2011 07:02	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1



Analysis Report

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Sample Description: SL-038-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438641
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4913 SDG#: DX149-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	7.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-038-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438641
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4913 SDG#: DX149-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0447 U	0.0447	1.04	1
11031	12378-PeCDD	40321-76-4	0.0544 JBQ	0.0352	5.22	1
11031	123478-HxCDD	39227-28-6	0.0276 U	0.0276	5.22	1
11031	123678-HxCDD	57653-85-7	0.0290 U	0.0290	5.22	1
11031	123789-HxCDD	19408-74-3	0.0735 JBQ	0.0288	5.22	1
11031	1234678-HpCDD	35822-46-9	0.332 JBQ	0.0263	5.22	1
11031	OCDD	3268-87-9	0.580 JB	0.0296	10.4	1
11031	2378-TCDF	51207-31-9	0.0289 U	0.0289	1.04	1
11031	12378-PeCDF	57117-41-6	0.0315 JBQ	0.0188	5.22	1
11031	23478-PeCDF	57117-31-4	0.0419 JBQ	0.0172	5.22	1
11031	123478-HxCDF	70648-26-9	0.0292 JB	0.0187	5.22	1
11031	123678-HxCDF	57117-44-9	0.0232 JBQ	0.0166	5.22	1
11031	123789-HxCDF	72918-21-9	0.147 JBQ	0.0201	5.22	1
11031	234678-HxCDF	60851-34-5	0.0281 JBQ	0.0161	5.22	1
11031	1234678-HpCDF	67562-39-4	0.0871 JBQ	0.0145	5.22	1
11031	1234789-HpCDF	55673-89-7	0.0399 JBQ	0.0198	5.22	1
11031	OCDF	39001-02-0	0.146 JBQ	0.0351	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	104	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	90	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present



Analysis Report

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Page 3 of 4

Sample Description: SL-038-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438641
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4913 SDG#: DX149-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

Sample Description: SL-038-SA5DS-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-038-SA5DS-SB-9.0-10.0

LLI Sample # SW 6438641
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4913 SDG#: DX149-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/25/2011 07:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438642
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4914 SDG#: DX149-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	2.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438642
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4914 SDG#: DX149-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0430 U	0.0430	0.999	1
11031	12378-PeCDD	40321-76-4	0.0477 JB	0.0339	5.00	1
11031	123478-HxCDD	39227-28-6	0.0311 JBQ	0.0289	5.00	1
11031	123678-HxCDD	57653-85-7	0.0296 U	0.0296	5.00	1
11031	123789-HxCDD	19408-74-3	0.0690 JB	0.0280	5.00	1
11031	1234678-HpCDD	35822-46-9	0.584 JB	0.0335	5.00	1
11031	OCDD	3268-87-9	4.56 JB	0.0246	9.99	1
11031	2378-TCDF	51207-31-9	0.0362 U	0.0362	0.999	1
11031	12378-PeCDF	57117-41-6	0.0354 JBQ	0.0222	5.00	1
11031	23478-PeCDF	57117-31-4	0.0601 JB	0.0210	5.00	1
11031	123478-HxCDF	70648-26-9	0.0717 JBQ	0.0219	5.00	1
11031	123678-HxCDF	57117-44-9	0.0286 JB	0.0195	5.00	1
11031	123789-HxCDF	72918-21-9	0.0294 JBQ	0.0211	5.00	1
11031	234678-HxCDF	60851-34-5	0.0622 JBQ	0.0177	5.00	1
11031	1234678-HpCDF	67562-39-4	0.195 JB	0.0150	5.00	1
11031	1234789-HpCDF	55673-89-7	0.0524 JBQ	0.0220	5.00	1
11031	OCDF	39001-02-0	0.392 JBQ	0.0368	9.99	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	96	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present



Analysis Report

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Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438642
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4914 SDG#: DX149-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 4 of 4

Sample Description: SL-164-SA7-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-164-SA7-SB-0.5-1.5

LLI Sample # SW 6438642
LLI Group # 1271486
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 10/14/2011 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 10/15/2011 09:45

Reported: 10/30/2011 16:19

X4914 SDG#: DX149-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11294002	10/25/2011 08:55	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11294002	10/21/2011 14:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11298162402A	10/25/2011 18:30	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/30/11 at 04:19 PM

Group Number: 1271486

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11298162402A Moisture Content by 160.3	Sample number(s): 6438634-6438642				100		80-120		

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11294002	Sample number(s): 6438634-6438642								
2378-TCDD	0.0609 U	0.0609	1.00	ng/kg	107		67-158		
12378-PeCDD	0.0460 J	0.0441	5.00	ng/kg	105		70-142		
123478-HxCDD	0.0460 J	0.0278	5.00	ng/kg	100		70-164		
123678-HxCDD	0.0276 U	0.0276	5.00	ng/kg	94		76-134		
123789-HxCDD	0.0516 J	0.0279	5.00	ng/kg	102		64-162		
1234678-HpCDD	0.267 J	0.0317	5.00	ng/kg	100		70-140		
OCDD	0.461 J	0.0245	10.0	ng/kg	95		78-144		
2378-TCDF	0.0429 U	0.0429	1.00	ng/kg	97		75-158		
12378-PeCDF	0.0382 J	0.0220	5.00	ng/kg	102		80-134		
23478-PeCDF	0.0374 J	0.0203	5.00	ng/kg	96		68-160		
123478-HxCDF	0.0843 J	0.0241	5.00	ng/kg	97		72-134		
123678-HxCDF	0.0224 J	0.0214	5.00	ng/kg	98		84-130		
123789-HxCDF	0.0575 J	0.0180	5.00	ng/kg	98		78-130		
234678-HxCDF	0.0541 J	0.0162	5.00	ng/kg	96		70-156		
1234678-HpCDF	0.154 J	0.0152	5.00	ng/kg	92		82-122		
1234789-HpCDF	0.0824 J	0.0190	5.00	ng/kg	96		78-138		
OCDF	0.172 J	0.0394	10.0	ng/kg	97		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11298162402A Moisture Content by 160.3	Sample number(s): 6438634-6438642					BKG: P438623 15.4	15.6	1	20
Batch number: 11294002	Sample number(s): 6438634-6438642					UNSPK: P435711			
2378-TCDD	109	105	67-158	3	25				
12378-PeCDD	105	104	70-142	0	25				
123478-HxCDD	98	98	70-164	1	25				
123678-HxCDD	93	95	76-134	3	25				
123789-HxCDD	100	102	64-162	3	25				
1234678-HpCDD	98	99	70-140	3	25				

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/30/11 at 04:19 PM

Group Number: 1271486

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
OCDD	96	95	78-144	1	25				
2378-TCDF	98	97	75-158	0	25				
12378-PeCDF	101	102	80-134	2	25				
23478-PeCDF	96	93	68-160	2	25				
123478-HxCDF	100	97	72-134	2	25				
123678-HxCDF	98	98	84-130	0	25				
123789-HxCDF	100	98	78-130	0	25				
234678-HxCDF	95	95	70-156	2	25				
1234678-HpCDF	90	90	82-122	1	25				
1234789-HpCDF	96	96	78-138	1	25				
OCDF	97	95	63-170	1	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11294002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6438634	76	78	73	78	87	86
6438635	86	94	78	87	91	98
6438636	72	76	70	77	83	86
6438637	69	70	70	76	78	77
6438638	67	71	64	71	80	77
6438639	70	72	65	73	80	77
6438640	74	75	69	76	81	83
6438641	74	75	71	78	84	79
6438642	71	72	66	74	79	77
Blank	86	88	61	70	88	96
MS	76	80	51	59	84	85
MSD	72	79	50	54	81	84
OPR	74	77	60	69	78	83
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
6438634	92	86	91	77	88	92
6438635	103	96	102	94	98	99
6438636	88	84	86	75	87	87
6438637	88	76	81	71	83	85
6438638	85	74	79	70	83	88
6438639	87	75	78	75	86	85
6438640	93	79	85	77	87	89
6438641	93	80	90	76	88	88
6438642	89	77	83	73	86	86
Blank	92	93	100	92	92	97
MS	77	83	88	81	90	89

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 10/30/11 at 04:19 PM

Group Number: 1271486

Surrogate Quality Control

MSD	72	83	92	79	83	84
OPR	88	82	87	81	86	87
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
6438634	88	93	103	78	79	
6438635	99	109	114	87	94	
6438636	86	89	94	75	77	
6438637	82	86	93	70	74	
6438638	82	84	91	68	73	
6438639	83	85	91	70	75	
6438640	86	91	99	73	79	
6438641	88	92	104	73	80	
6438642	83	87	96	72	75	
Blank	96	108	118	82	92	
MS	89	95	102	78	84	
MSD	85	92	103	72	79	
OPR	86	95	103	73	81	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

acct# 13013 Cp# 1271486

sample# 6438634-42

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 150.3 will be performed on soil in 18 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.							*Metals EPA 80106/8208/7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 8650 (10%)	TPH-GRO EPA 8015B \$	*TPH-EFH EPA 8015B Mod	*Nitrate EPA 300.0	*Formaldehyde EPA 8315A	*t-NDMA EPA 1025C	*Energetics EPA 8330A	*Cyanide EPA 9012B	*Terphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohols EPA 8015B	*Downal EPA 8270	
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																						
SL-006-SA3-SB-4.0-5.0	10.13.11	1529	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X	X													
SL-006-SA3-SB-9.0-10.0	10.13.11	1447	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X	X												Sampled 10.13.11	
SL-036-SA5DS-SB-4.0-5.0	10.14.11	1138	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X	X												Sampled 10.13.11	
SL-036-SA5DS-SB-9.0-10.0	10.14.11	1134	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X	X													
SL-037-SA5DS-SB-4.0-5.0	10.14.11	0947	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X	X													
SL-037-SA5DS-SB-9.0-10.0	10.14.11	0905	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X	X													
SL-038-SA5DS-SB-4.0-5.0	10.14.11	1100	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X	X													
SL-038-SA5DS-SB-9.0-10.0	10.14.11	1027	SOIL	NONE	2-16 oz Jars	X	X	X	X	X	X	X	X	X													
SL-164-SA7-SB-0.5-1.5	10.14.11	1420	SOIL	NONE	1-SS Sleeve				X	X																	
SL-164-SA7-SB-0.5-1.5	10.14.11	1420	SOIL	NONE	2-16 oz Jars	X	X			X	X	X	X	X			X	X	X	X	X	X	X	X			
EB-SA3-SB-101411	10.14.11	1400	WATER	NONE	1-1 L Amber														X							HGL ASTM II WATER-HA crew	
TB-101411	10.14.11	0800	WATER	NONE	1-1 L Amber														X								
TB-101411	10.14.11	0800	SOIL	NONE	1-4 oz Jar														X								
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																						Laboratory:	
		10/13/2011 / 1630																								Lancaster Laboratories, Inc.	
Received by: (Signature)		Date/Time		Airbill No.(s)																							
Bandy		10-15-11 10:18		8767 9858 6806, 6817																							

Bandy

0945
24 10/15/11

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

December 05, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 11/08/2011

Group Number: 1275265

SDG: DE281

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-001-SA3-SB-2.0-3.0 Soil	6462616
SL-004-SA3-SB-4.0-5.0 Soil	6462617
SL-004-SA3-SB-7.0-8.0 Soil	6462618
SL-013-SA3-SB-0.5-1.5 Soil	6462619
SL-010-SA3-SB-3.0-4.0 Soil	6462620
EB-SA3-SB-110711 Water	6462621
TB-110711 Sand	6462622
TB-110711 Water	6462623
TB-110711 Water	6462624

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Sarah M. Snyder
Senior Specialist

Sample Description: SL-001-SA3-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SB

LLI Sample # SW 6462616
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL001 SDG#: DE281-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400		1
04688	Benzoic acid	65-85-0	170	U 170	520		1
04688	Benzyl alcohol	100-51-6	170	U 170	520		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170		1
04688	4-Chloroaniline	106-47-8	69	U 69	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170		1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520		1
04688	2,4-Dinitrophenol	51-28-5	340	U 340	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	34	U 34	170		1
04688	4-Methylphenol	106-44-5	34	U 34	170		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	34	U 34	170		1
04688	4-Nitroaniline	100-01-6	69	U 69	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	520		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	21	J 17	170		1
04688	Pentachlorophenol	87-86-5	170	U 170	520		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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Sample Description: SL-001-SA3-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SB

LLI Sample # SW 6462616
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL001 SDG#: DE281-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17	U 17	170		1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	34	U 34	170		1
04688	2,4,6-Trichlorophenol	88-06-2	34	U 34	170		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69	U 0.69	1.7		1
10138	Acenaphthylene	208-96-8	0.34	U 0.34	1.7		1
10138	Anthracene	120-12-7	0.34	U 0.34	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.69	U 0.69	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.69	U 0.69	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	0.69	U 0.69	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	0.69	U 0.69	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	1.3	J 0.69	1.7		1
10138	Butylbenzylphthalate	85-68-7	6.2	U 6.2	19		1
10138	Di-n-butylphthalate	84-74-2	7.4	J 6.2	19		1
10138	Chrysene	218-01-9	0.97	J 0.34	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U 0.69	1.7		1
10138	Diethylphthalate	84-66-2	6.2	U 6.2	19		1
10138	Dimethylphthalate	131-11-3	6.2	U 6.2	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	25	6.2	19		1
10138	Fluoranthene	206-44-0	0.96	J 0.69	1.7		1
10138	Fluorene	86-73-7	0.69	U 0.69	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.69	U 0.69	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.69	U 0.69	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.69	U 0.69	1.7		1
10138	Naphthalene	91-20-3	0.69	U 0.69	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U 0.69	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.2	U 6.2	19		1
10138	Phenanthrene	85-01-8	0.69	U 0.69	1.7		1
10138	Pyrene	129-00-0	0.81	J 0.69	1.7		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0	U 1.0	3.4		1
10225	Aroclor 5442	12642-23-8	1.0	U 1.0	3.4		1
10225	Aroclor 5460	11126-42-4	1.0	U 1.0	3.4		1
10225	PCB-1016	12674-11-2	0.34	U 0.34	1.8		1
10225	PCB-1221	11104-28-2	0.34	U 0.34	1.8		1
10225	PCB-1232	11141-16-5	0.34	U 0.34	1.8		1
10225	PCB-1242	53469-21-9	0.34	U 0.34	1.8		1
10225	PCB-1248	12672-29-6	0.34	U 0.34	1.8		1
10225	PCB-1254	11097-69-1	0.34	U 0.34	1.8		1
10225	PCB-1260	11096-82-5	0.40	U 0.40	1.8		1
10225	PCB-1262	37324-23-5	0.34	U 0.34	1.8		1
10225	PCB-1268	11100-14-4	0.34	U 0.34	1.8		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,100	6.00	19.8		1
07914	Boron	7440-42-8	3.49	J 0.357	4.96		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA3-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SB

LLI Sample # SW 6462616
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL001 SDG#: DE281-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	1,080	2.48	19.8		1
01654	Iron	7439-89-6	17,400	2.59	19.8		1
01656	Lithium	7439-93-2	23.3	0.62	2.0		1
01657	Magnesium	7439-95-4	2,840	0.437	9.92		1
06958	Manganese	7439-96-5	194	0.0357	0.496		1
10145	Phosphorus	7723-14-0	226	0.347	9.92		1
01662	Potassium	7440-09-7	3,180	11.2	49.6		1
01667	Sodium	7440-23-5	89.4 J	5.90	99.2		1
07968	Strontium	7440-24-6	10.8	0.0248	0.496		1
06969	Tin	7440-31-5	2.66 J	0.318	9.92		1
06970	Titanium	7440-32-6	967	0.0705	0.992		1
10146	Zirconium	7440-67-7	2.19 J	0.456	4.96		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0756 U	0.0756	0.204		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.48	0.0817	0.409		2
06126	Barium	7440-39-3	57.6	0.108	0.409		2
06127	Beryllium	7440-41-7	0.556	0.0163	0.102		2
06128	Cadmium	7440-43-9	0.0724 J	0.0450	0.102		2
06131	Chromium	7440-47-3	10.2	0.123	0.409		2
06132	Cobalt	7440-48-4	4.22	0.0204	0.102		2
06133	Copper	7440-50-8	5.38	0.0817	0.409		2
06135	Lead	7439-92-1	5.66	0.0104	0.204		2
06138	Molybdenum	7439-98-7	0.252	0.0511	0.102		2
06139	Nickel	7440-02-0	7.04	0.102	0.409		2
06141	Selenium	7782-49-2	0.113 J	0.0593	0.409		2
06142	Silver	7440-22-4	0.0250 J	0.0145	0.102		2
06145	Thallium	7440-28-0	0.267	0.0307	0.102		2
06148	Vanadium	7440-62-2	22.7	0.0225	0.102		2
06149	Zinc	7440-66-6	56.3	0.572	3.07		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0071 U	0.0071	0.101		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.84 U	0.84	1.0		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.3 U	9.3	31.0		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.67 J	0.21	1.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA3-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SB

LLI Sample # SW 6462616
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL001 SDG#: DE281-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	Wet Chemistry	SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.70	0.0100	0.0100		1
	Wet Chemistry	EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	3.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11318SLA026	11/26/2011 11:13	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11318SLB026	11/29/2011 01:16	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11318SLB026	11/14/2011 18:10	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11318SLA026	11/14/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113150020A	11/16/2011 07:26	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	113150020A	11/11/2011 16:00	JoElla L Rice	1
01643	Aluminum	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	113125708003	11/10/2011 07:06	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06126	Barium	SW-846 6020	1	113121026003D	11/16/2011 15:22	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA3-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA3-SB

LLI Sample # SW 6462616
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL001 SDG#: DE281-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06133	Copper	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	113121026003C	11/16/2011 15:22	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	113121026003B	11/16/2011 15:22	Choon Y Tian	2
06142	Silver	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	113121026003A	11/16/2011 15:22	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	113125711003	11/09/2011 17:31	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	113125708003	11/09/2011 10:56	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	113121026003	11/09/2011 11:35	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	113125711003	11/09/2011 12:16	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11313621201A	11/09/2011 14:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11313621202A	11/09/2011 16:12	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11322243201A	11/19/2011 09:22	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11313621201A	11/09/2011 06:05	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11313621202A	11/09/2011 06:10	William L Hamaker Jr	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11319039401A	11/15/2011 09:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11322243201A	11/18/2011 08:40	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11315162401B	11/11/2011 22:24	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462617
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 14:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL044 SDG#: DE281-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	17.3 U	17.3	34.7		1
The internal standard peak areas were outside of QC limits in the method blank and LCS associated with this sample. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	170	U 170	520		1
04688	Benzyl alcohol	100-51-6	170	U 170	520		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170		1
04688	4-Chloroaniline	106-47-8	69	U 69	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520		1
04688	2,4-Dinitrophenol	51-28-5	350	U 350	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	35	U 35	170		1
04688	4-Methylphenol	106-44-5	35	U 35	170		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	35	U 35	170		1
04688	4-Nitroaniline	100-01-6	69	U 69	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	520		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462617
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 14:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL044 SDG#: DE281-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U 170	520		1
04688	Phenol	108-95-2	17	U 17	170		1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	170		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	170		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69	U 0.69	1.7		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.7		1
10138	Anthracene	120-12-7	0.35	U 0.35	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.69	U 0.69	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.69	U 0.69	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	0.69	U 0.69	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	0.69	U 0.69	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	0.69	U 0.69	1.7		1
10138	Butylbenzylphthalate	85-68-7	6.2	U 6.2	19		1
10138	Di-n-butylphthalate	84-74-2	7.4	J 6.2	19		1
10138	Chrysene	218-001-9	0.35	U 0.35	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U 0.69	1.7		1
10138	Diethylphthalate	84-66-2	6.2	U 6.2	19		1
10138	Dimethylphthalate	131-11-3	6.2	U 6.2	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	19	6.2	19		1
10138	Fluoranthene	206-44-0	0.69	U 0.69	1.7		1
10138	Fluorene	86-73-7	0.69	U 0.69	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.69	U 0.69	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.69	U 0.69	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.69	U 0.69	1.7		1
10138	Naphthalene	91-20-3	0.69	U 0.69	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U 0.69	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.2	U 6.2	19		1
10138	Phenanthrene	85-01-8	0.69	U 0.69	1.7		1
10138	Pyrene	129-00-0	0.69	U 0.69	1.7		1
GC Volatiles	TPH GRO	SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
	mod						
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U 0.2	1.1		25.46
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	62	U 62	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	42	U 42	120	1000000 0	1

*=This limit was used in the evaluation of the final result

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

Sample Description: SL-004-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462617
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 14:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL044 SDG#: DE281-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	83 U	83	250	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	83 U	83	250	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	42 U	42	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	42 U	42	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	42 U	42	120	1000000 0	1
10132	HMX	2691-41-0	100 U	100	310	1000000 0	1
10132	Nitrobenzene	98-95-3	42 U	42	120	1000000 0	1
10132	Nitroglycerin	55-63-0	830 U	830	2,500	1000000 0	1
10132	2-Nitrotoluene	88-72-2	83 U	83	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100 U	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	83 U	83	120	1000000 0	1
10132	PETN	78-11-5	830 U	830	2,500	1000000 0	1
10132	RDX	121-82-4	52 U	52	120	1000000 0	1
10132	Tetryl	479-45-8	64 U	64	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	42 U	42	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	42 U	42	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	620 U	620	1,500		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4		1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4		1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4		1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8		1
10225	PCB-1221	11104-28-2	0.34 U	0.34	1.8		1
10225	PCB-1232	11141-16-5	0.34 U	0.34	1.8		1
10225	PCB-1242	53469-21-9	0.34 U	0.34	1.8		1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8		1
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.8		1
10225	PCB-1260	11096-82-5	0.41 U	0.41	1.8		1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8		1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8		1

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Sample Description: SL-004-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462617
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 14:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL044 SDG#: DE281-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	520		1
10501	Isopropanol	67-63-0	100 U	100	520		1
10501	Methanol	67-56-1	100 U	100	520		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.2 U	5.2	10		1
08283	Ethylene glycol	107-21-1	5.2 U	5.2	10		1
08283	Propylene glycol	57-55-6	5.2 U	5.2	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.6		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.6		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.6		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.42 U	0.42	1.2		1
10199	EFH (C15-C20)	n.a.	0.42 U	0.42	1.2		1
10199	EFH (C21-C30)	n.a.	0.42 U	0.42	1.2		1
10199	EFH (C30 - C40)	n.a.	0.91 J	0.42	1.2		1
10199	EFH (C8-C11)	n.a.	0.42 U	0.42	1.2		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,400	6.00	19.8		1
07914	Boron	7440-42-8	5.17	0.357	4.96		1
01650	Calcium	7440-70-2	1,260	2.48	19.8		1
01654	Iron	7439-89-6	16,500	2.59	19.8		1
01656	Lithium	7439-93-2	21.7	0.61	2.0		1
01657	Magnesium	7439-95-4	3,090	0.436	9.91		1
06958	Manganese	7439-96-5	224	0.0357	0.496		1
10145	Phosphorus	7723-14-0	196	0.347	9.91		1
01662	Potassium	7440-09-7	2,930	11.2	49.6		1
01667	Sodium	7440-23-5	88.4 J	5.90	99.1		1
07968	Strontium	7440-24-6	13.0	0.0248	0.496		1
06969	Tin	7440-31-5	2.58 J	0.317	9.91		1
06970	Titanium	7440-32-6	956	0.0704	0.991		1
10146	Zirconium	7440-67-7	2.41 J	0.456	4.96		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0755 U	0.0755	0.204		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.62	0.0816	0.408		2
06126	Barium	7440-39-3	95.1	0.108	0.408		2

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Sample Description: SL-004-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462617
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 14:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL044 SDG#: DE281-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06127	Beryllium	7440-41-7	0.804	0.0163	0.102		2
06128	Cadmium	7440-43-9	0.0713 J	0.0449	0.102		2
06131	Chromium	7440-47-3	15.7	0.122	0.408		2
06132	Cobalt	7440-48-4	5.23	0.0204	0.102		2
06133	Copper	7440-50-8	6.00	0.0816	0.408		2
06135	Lead	7439-92-1	6.51	0.0104	0.204		2
06138	Molybdenum	7439-98-7	0.415	0.0510	0.102		2
06139	Nickel	7440-02-0	9.41	0.102	0.408		2
06141	Selenium	7782-49-2	0.141 J	0.0592	0.408		2
06142	Silver	7440-22-4	0.0301 J	0.0145	0.102		2
06145	Thallium	7440-28-0	0.318	0.0306	0.102		2
06148	Vanadium	7440-62-2	30.9	0.0224	0.102		2
06149	Zinc	7440-66-6	66.7	0.571	3.06		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0070 U	0.0070	0.100		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.84 U	0.84	1.0		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.4 J	0.84	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.2		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.0		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.52		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.59	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	3.9	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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Sample Description: SL-004-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462617
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 14:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL044 SDG#: DE281-02

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-004-SA3-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11313SLF026	11/17/2011 05:25	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11318SLA026	11/26/2011 11:38	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11318SLB026	11/29/2011 04:42	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11313SLF026	11/10/2011 11:45	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11318SLB026	11/14/2011 18:10	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11318SLA026	11/14/2011 18:30	Sally L Appleyard	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11313A16A	11/09/2011 23:35	Marie D John	25.46
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201131226126	11/08/2011 16:14	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201131226126	11/08/2011 16:15	Lois E Hiltz	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	113190001A	11/19/2011 00:42	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	113180003A	11/16/2011 14:47	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113150020A	11/16/2011 07:45	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	113150020A	11/11/2011 16:00	JoElla L Rice	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	113180003A	11/14/2011 14:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	113190001A	11/15/2011 14:00	Wanda F Oswald	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	113130024A	11/11/2011 00:33	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	113200029A	11/16/2011 21:49	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	113180012A	11/15/2011 14:50	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	113190011A	11/17/2011 18:47	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	113190011A	11/15/2011 16:15	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	113180012A	11/14/2011 18:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	113130024A	11/10/2011 19:00	Lei Yin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	113200029A	11/16/2011 16:30	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1

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Sample Description: SL-004-SA3-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462617
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 14:50

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Reported: 12/05/2011 13:13

SL044 SDG#: DE281-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	113125708003	11/10/2011 07:33	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06126	Barium	SW-846 6020	1	113121026003D	11/16/2011 15:25	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06133	Copper	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06135	Lead	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	113121026003C	11/16/2011 15:25	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	113121026003B	11/16/2011 15:25	Choon Y Tian	2
06142	Silver	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	113121026003A	11/16/2011 15:25	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	113125711003	11/09/2011 17:32	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	113125708003	11/09/2011 10:56	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	113121026003	11/09/2011 11:35	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	113125711003	11/09/2011 12:16	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11313621201A	11/09/2011 15:49	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11313621201A	11/09/2011 15:49	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11313621202A	11/09/2011 16:33	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11322243201A	11/19/2011 09:28	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11320102202A	11/17/2011 08:40	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11313621201A	11/09/2011 06:05	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11313621202A	11/09/2011 06:10	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11320102202A	11/16/2011 15:00	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11319039401A	11/15/2011 09:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11322243201A	11/18/2011 08:40	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11335162401A	12/01/2011 22:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA3-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462618
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL049 SDG#: DE281-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	17.8 U	17.8	35.5		1
The internal standard peak areas were outside of QC limits in the method blank and LCS associated with this sample. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
The internal standard peak areas were outside of QC limits for both the initial injection and the re-injection of this sample. The sample was also re-extracted outside of the method required holding time, and internal standard peak areas were within QC limits. The values here are from the initial injection of the sample.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530		1
04688	Benizidine	92-87-5	1,200	U 1,200	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	530		1
04688	Benzyl alcohol	100-51-6	180	U 180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	71	U 71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530		1
04688	2,4-Dinitrophenol	51-28-5	360	U 360	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA3-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462618
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL049 SDG#: DE281-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	71	U 71	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U 180	530		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.71	U 0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.71	U 0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U 0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U 0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U 0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4	U 6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4	U 6.4	19		1
10138	Chrysene	218-01-9	0.36	U 0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U 0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J 6.4	19		1
10138	Fluoranthene	206-44-0	0.71	U 0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U 0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U 0.71	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.71	U 0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71	U 0.71	1.8		1
10138	Naphthalene	91-20-3	0.71	U 0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U 0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U 6.4	19		1
10138	Phenanthrene	85-01-8	0.71	U 0.71	1.8		1
10138	Pyrene	129-00-0	0.71	U 0.71	1.8		1
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U 0.2	1.2		27.53

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA3-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462618
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL049 SDG#: DE281-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	62 U	62	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	41 U	41	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	82 U	82	250	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	82 U	82	250	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	41 U	41	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	41 U	41	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	41 U	41	120	1000000 0	1
10132	HMX	2691-41-0	100 U	100	310	1000000 0	1
10132	Nitrobenzene	98-95-3	41 U	41	120	1000000 0	1
10132	Nitroglycerin	55-63-0	820 U	820	2,500	1000000 0	1
10132	2-Nitrotoluene	88-72-2	82 U	82	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100 U	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	82 U	82	120	1000000 0	1
10132	PETN	78-11-5	820 U	820	2,500	1000000 0	1
10132	RDX	121-82-4	51 U	51	120	1000000 0	1
10132	Tetryl	479-45-8	63 U	63	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	41 U	41	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	41 U	41	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	640 U	640	1,600		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.35 U	0.35	1.8		1
10225	PCB-1232	11141-16-5	0.35 U	0.35	1.8		1
10225	PCB-1242	53469-21-9	0.35 U	0.35	1.8		1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8		1

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Sample Description: SL-004-SA3-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462618
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 15:25

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14420 Albemarle Point Place
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Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL049 SDG#: DE281-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8		1
10225	PCB-1260	11096-82-5	0.42 U	0.42	1.8		1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	530		1
10501	Isopropanol	67-63-0	110 U	110	530		1
10501	Methanol	67-56-1	110 U	110	530		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.3 U	5.3	11		1
08283	Ethylene glycol	107-21-1	5.3 U	5.3	11		1
08283	Propylene glycol	57-55-6	5.3 U	5.3	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.7		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.7		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.7		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.43 U	0.43	1.3		1
10199	EFH (C15-C20)	n.a.	0.43 U	0.43	1.3		1
10199	EFH (C21-C30)	n.a.	0.43 U	0.43	1.3		1
10199	EFH (C30 - C40)	n.a.	0.58 J	0.43	1.3		1
10199	EFH (C8-C11)	n.a.	0.43 U	0.43	1.3		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,500	6.39	21.1		1
07914	Boron	7440-42-8	4.36 J	0.380	5.28		1
01650	Calcium	7440-70-2	1,500	2.64	21.1		1
01654	Iron	7439-89-6	19,200	2.75	21.1		1
01656	Lithium	7439-93-2	20.4	0.65	2.1		1
01657	Magnesium	7439-95-4	3,910	0.464	10.6		1
06958	Manganese	7439-96-5	320	0.0380	0.528		1
10145	Phosphorus	7723-14-0	127	0.369	10.6		1
01662	Potassium	7440-09-7	2,130	11.9	52.8		1
01667	Sodium	7440-23-5	117	6.28	106		1
07968	Strontium	7440-24-6	12.6	0.0264	0.528		1
06969	Tin	7440-31-5	3.00 J	0.338	10.6		1
06970	Titanium	7440-32-6	1,050	0.0749	1.06		1
10146	Zirconium	7440-67-7	2.33 J	0.486	5.28		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA3-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462618
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL049 SDG#: DE281-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0773 U	0.0773	0.209		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.98	0.0836	0.418		2
06126	Barium	7440-39-3	55.2	0.111	0.418		2
06127	Beryllium	7440-41-7	0.518	0.0167	0.105		2
06128	Cadmium	7440-43-9	0.0460 U	0.0460	0.105		2
06131	Chromium	7440-47-3	17.3	0.125	0.418		2
06132	Cobalt	7440-48-4	5.27	0.0209	0.105		2
06133	Copper	7440-50-8	6.46	0.0836	0.418		2
06135	Lead	7439-92-1	5.53	0.0107	0.209		2
06138	Molybdenum	7439-98-7	0.350	0.0523	0.105		2
06139	Nickel	7440-02-0	8.49	0.105	0.418		2
06141	Selenium	7782-49-2	0.141 J	0.0606	0.418		2
06142	Silver	7440-22-4	0.0210 J	0.0148	0.105		2
06145	Thallium	7440-28-0	0.409	0.0314	0.105		2
06148	Vanadium	7440-62-2	35.5	0.0230	0.105		2
06149	Zinc	7440-66-6	55.7	0.585	3.14		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0073 U	0.0073	0.104		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0	0.86	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.3 J	0.86	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.0		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.53		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.25	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	6.2	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA3-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462618
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL049 SDG#: DE281-03

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-004-SA3-SB-7.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11313SLF026	11/17/2011 05:44	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11318SLA026	11/26/2011 12:02	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11318SLB026	11/29/2011 11:58	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11313SLF026	11/10/2011 11:45	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11318SLB026	11/14/2011 18:10	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11318SLA026	11/14/2011 18:30	Sally L Appleyard	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11313A16A	11/10/2011 00:12	Marie D John	27.53
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201131226126	11/08/2011 16:16	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201131226126	11/08/2011 16:17	Lois E Hiltz	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	113190001A	11/19/2011 02:50	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	113180003A	11/16/2011 15:16	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113150020A	11/16/2011 08:03	Jessica L Miller	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	113150020A	11/11/2011 16:00	JoElla L Rice	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	113180003A	11/14/2011 14:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	113190001A	11/15/2011 14:00	Wanda F Oswald	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	113130024A	11/11/2011 00:49	Elizabeth J Marin	1
08283	19a Glycols by 8015B modified	SW-846 8015B	1	113200029A	11/16/2011 22:04	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	113180012A	11/15/2011 15:12	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	113190011A	11/17/2011 19:58	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	113190011A	11/15/2011 16:15	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	113180012A	11/14/2011 18:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	113130024A	11/10/2011 19:00	Lei Yin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	113200029A	11/16/2011 16:30	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA3-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA3-SB

LLI Sample # SW 6462618
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL049 SDG#: DE281-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	113125708003	11/10/2011 07:45	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06126	Barium	SW-846 6020	1	113121026003D	11/16/2011 14:54	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06133	Copper	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06135	Lead	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	113121026003C	11/16/2011 14:54	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	113121026003B	11/19/2011 20:15	Choon Y Tian	2
06142	Silver	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	113121026003A	11/16/2011 14:54	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	113125711003	11/09/2011 17:33	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	113125708003	11/09/2011 10:56	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	113121026003	11/09/2011 11:35	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	113125711003	11/09/2011 12:16	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11313621201A	11/09/2011 16:04	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11313621201A	11/09/2011 16:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11313621202A	11/09/2011 16:54	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11322243201A	11/19/2011 09:42	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11320102202A	11/17/2011 08:43	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11313621201A	11/09/2011 06:05	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11313621202A	11/09/2011 06:10	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11320102202A	11/16/2011 15:00	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11319039401A	11/15/2011 09:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11322243201A	11/18/2011 08:40	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11335162401A	12/01/2011 22:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-013-SA3-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-013-SA3-SB

LLI Sample # SW 6462619
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL130 SDG#: DE281-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	17.3 U	17.3	34.6		1
The internal standard peak areas were outside of QC limits in the method blank and LCS associated with this sample. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	170	U 170	520		1
04688	Benzyl alcohol	100-51-6	170	U 170	520		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170		1
04688	4-Chloroaniline	106-47-8	69	U 69	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520		1
04688	2,4-Dinitrophenol	51-28-5	350	U 350	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	45	J 17	350		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	35	U 35	170		1
04688	4-Methylphenol	106-44-5	35	U 35	170		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	35	U 35	170		1
04688	4-Nitroaniline	100-01-6	69	U 69	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-013-SA3-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-013-SA3-SB

LLI Sample # SW 6462619
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL130 SDG#: DE281-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	4-Nitrophenol	100-02-7	170	U 170	520		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	170	U 170	520		1
04688	Phenol	108-95-2	17	U 17	170		1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	170		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	170		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69	U 0.69	1.7		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.7		1
10138	Anthracene	120-12-7	0.35	U 0.35	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.84	J 0.69	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.96	J 0.69	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	1.9	U 0.69	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	1.4	J 0.69	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	J 0.69	1.7		1
10138	Butylbenzylphthalate	85-68-7	6.2	U 6.2	19		1
10138	Di-n-butylphthalate	84-74-2	8.2	J 6.2	19		1
10138	Chrysene	218-01-9	1.9	U 0.35	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U 0.69	1.7		1
10138	Diethylphthalate	84-66-2	6.2	U 6.2	19		1
10138	Dimethylphthalate	131-11-3	6.2	U 6.2	19		1
10138	Fluoranthene	206-44-0	2.1	U 0.69	1.7		1
10138	Fluorene	86-73-7	0.69	U 0.69	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.78	J 0.69	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.69	U 0.69	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.69	U 0.69	1.7		1
10138	Naphthalene	91-20-3	0.69	U 0.69	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U 0.69	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.2	U 6.2	19		1
10138	Phenanthrene	85-01-8	1.2	J 0.69	1.7		1
10138	Pyrene	129-00-0	1.7	J 0.69	1.7		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	62	U 62	120	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	42	U 42	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	83	U 83	250	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	83	U 83	250	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	42	U 42	120	1000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

Sample Description: SL-013-SA3-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-013-SA3-SB

LLI Sample # SW 6462619
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL130 SDG#: DE281-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,4-Dinitrotoluene	121-14-2	42 U	42	120	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	42 U	42	120	10000000	1
10132	HMX	2691-41-0	100 U	100	310	10000000	1
10132	Nitrobenzene	98-95-3	42 U	42	120	10000000	1
10132	Nitroglycerin	55-63-0	830 U	830	2,500	10000000	1
10132	2-Nitrotoluene	88-72-2	83 U	83	120	10000000	1
10132	3-Nitrotoluene	99-08-1	100 U	100	120	10000000	1
10132	4-Nitrotoluene	99-99-0	83 U	83	120	10000000	1
10132	PETN	78-11-5	830 U	830	2,500	10000000	1
10132	RDX	121-82-4	52 U	52	120	10000000	1
10132	Tetryl	479-45-8	64 U	64	120	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	42 U	42	120	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	42 U	42	120	10000000	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde	50-00-0	820 U	820	2,000		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	5.2 U	5.2	17		5
10225	Aroclor 5442	12642-23-8	5.2 U	5.2	17		5
10225	Aroclor 5460	11126-42-4	5.2 U	5.2	17		5
10225	PCB-1016	12674-11-2	1.7 U	1.7	8.8		5
10225	PCB-1221	11104-28-2	1.7 U	1.7	8.8		5
10225	PCB-1232	11141-16-5	1.7 U	1.7	8.8		5
10225	PCB-1242	53469-21-9	1.7 U	1.7	8.8		5
10225	PCB-1248	12672-29-6	1.7 U	1.7	8.8		5
10225	PCB-1254	11097-69-1	1.7 U	1.7	8.8		5
10225	PCB-1260	11096-82-5	2.6 J	2.0	8.8		5
10225	PCB-1262	37324-23-5	1.7 U	1.7	8.8		5
10225	PCB-1268	11100-14-4	1.7 U	1.7	8.8		5
Reporting limits were raised due to interference from the sample matrix.							
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	520		1
10501	Isopropanol	67-63-0	100 U	100	520		1
10501	Methanol	67-56-1	100 U	100	520		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-013-SA3-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-013-SA3-SB

LLI Sample # SW 6462619
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL130 SDG#: DE281-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC Miscellaneous	SW-846 8015B modified		mg/kg		mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.2	U	5.2	10		1
08283	Ethylene glycol	107-21-1	5.2	U	5.2	10		1
08283	Propylene glycol	57-55-6	5.2	U	5.2	10		1
GC Petroleum Hydrocarbons	SW-846 8015B		mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.6		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.6		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.6		1
GC Petroleum Hydrocarbons	SW-846 8015B modified		mg/kg		mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.42	U	0.42	1.2		1
10199	EFH (C15-C20)	n.a.	0.42	U	0.42	1.2		1
10199	EFH (C21-C30)	n.a.	5.9		0.42	1.2		1
10199	EFH (C30 - C40)	n.a.	20		0.42	1.2		1
10199	EFH (C8-C11)	n.a.	0.42	U	0.42	1.2		1
Metals	SW-846 6010B		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,400		6.10	20.2		1
07914	Boron	7440-42-8	5.19		0.363	5.04		1
01650	Calcium	7440-70-2	3,720		2.52	20.2		1
01654	Iron	7439-89-6	21,300		2.63	20.2		1
01656	Lithium	7439-93-2	22.2		0.63	2.0		1
01657	Magnesium	7439-95-4	4,920		0.444	10.1		1
06958	Manganese	7439-96-5	361		0.0363	0.504		1
10145	Phosphorus	7723-14-0	578		0.353	10.1		1
01662	Potassium	7440-09-7	3,730		11.4	50.4		1
01667	Sodium	7440-23-5	81.0	J	6.00	101		1
07968	Strontium	7440-24-6	23.2		0.0252	0.504		1
06969	Tin	7440-31-5	2.71	J	0.323	10.1		1
06970	Titanium	7440-32-6	1,130		0.0716	1.01		1
10146	Zirconium	7440-67-7	3.93	J	0.464	5.04		1
	SW-846 6020		mg/kg		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.131	J	0.0753	0.204		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.06		0.0814	0.407		2
06126	Barium	7440-39-3	136		0.108	0.407		2
06127	Beryllium	7440-41-7	0.656		0.0163	0.102		2
06128	Cadmium	7440-43-9	0.276		0.0448	0.102		2
06131	Chromium	7440-47-3	27.4		0.122	0.407		2
06132	Cobalt	7440-48-4	8.62		0.0204	0.102		2
06133	Copper	7440-50-8	13.0		0.0814	0.407		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-013-SA3-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-013-SA3-SB

LLI Sample # SW 6462619
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL130 SDG#: DE281-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06135	Lead	7439-92-1	14.1	0.0104	0.204		2
06138	Molybdenum	7439-98-7	0.514	0.0509	0.102		2
06139	Nickel	7440-02-0	17.4	0.102	0.407		2
06141	Selenium	7782-49-2	0.150 J	0.0590	0.407		2
06142	Silver	7440-22-4	0.695	0.0145	0.102		2
06145	Thallium	7440-28-0	0.310	0.0305	0.102		2
06148	Vanadium	7440-62-2	49.2	0.0224	0.102		2
06149	Zinc	7440-66-6	79.0	0.570	3.05		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0110 J	0.0071	0.100		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.84 U	0.84	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	5.1	0.84	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.3 U	9.3	31.2		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.0		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.18 U	0.18	0.51		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	6.95	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	3.7	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Sample Description: SL-013-SA3-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-013-SA3-SB

LLI Sample # SW 6462619
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL130 SDG#: DE281-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11313SLF026	11/17/2011 06:03	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11318SLA026	11/26/2011 12:28	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11318SLB026	11/29/2011 12:32	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11313SLF026	11/10/2011 11:45	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11318SLB026	11/14/2011 18:10	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11318SLA026	11/14/2011 18:30	Sally L Appleyard	1
10132	15a Energetics by 8330A	SW-846 8330A	1	113190001A	11/19/2011 03:32	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	113180003A	11/16/2011 15:25	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113150020A	11/16/2011 08:22	Jessica L Miller	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	113150020A	11/11/2011 16:00	JoElla L Rice	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	113180003A	11/14/2011 14:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	113190001A	11/15/2011 14:00	Wanda F Oswald	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	113130024A	11/11/2011 01:06	Elizabeth J Marin	1
08283	19a Glycols by 8015B	SW-846 8015B modified	1	113200029A	11/16/2011 22:18	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	113180012A	11/15/2011 16:42	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	113190011A	11/17/2011 22:22	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	113190011A	11/15/2011 16:15	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	113180012A	11/14/2011 18:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	113130024A	11/10/2011 19:00	Lei Yin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	113200029A	11/16/2011 16:30	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	113125708003	11/10/2011 07:49	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06126	Barium	SW-846 6020	1	113121026003D	11/16/2011 15:28	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06133	Copper	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06135	Lead	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-013-SA3-SB-0.5-1.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-013-SA3-SB

LLI Sample # SW 6462619
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL130 SDG#: DE281-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	113121026003C	11/16/2011 15:28	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	113121026003B	11/16/2011 15:28	Choon Y Tian	2
06142	Silver	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	113121026003A	11/16/2011 15:28	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	113125711003	11/09/2011 17:35	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	113125708003	11/09/2011 10:56	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	113121026003	11/09/2011 11:35	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	113125711003	11/09/2011 12:16	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11313621201A	11/09/2011 16:19	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11313621201A	11/09/2011 16:19	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11313621202A	11/09/2011 17:15	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11322243201A	11/19/2011 10:02	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11320102202A	11/17/2011 08:44	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11313621201A	11/09/2011 06:05	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11313621202A	11/09/2011 06:10	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11320102202A	11/16/2011 15:00	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11319039401A	11/15/2011 09:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11322243201A	11/18/2011 08:40	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11335162401A	12/01/2011 22:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

Sample Description: SL-010-SA3-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-010-SA3-SB

LLI Sample # SW 6462620
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL103 SDG#: DE281-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	175 U	175	349		10
The internal standard peak areas were outside of QC limits in the method blank and LCS associated with this sample. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	170	U 170	520		1
04688	Benzyl alcohol	100-51-6	170	U 170	520		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170		1
04688	4-Chloroaniline	106-47-8	70	U 70	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	Diethylphthalate	84-66-2	20	J 17	170		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520		1
04688	2,4-Dinitrophenol	51-28-5	350	U 350	1,000		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	70	U 70	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	35	U 35	170		1
04688	4-Methylphenol	106-44-5	35	U 35	170		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	35	U 35	170		1
04688	4-Nitroaniline	100-01-6	70	U 70	170		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-010-SA3-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-010-SA3-SB

LLI Sample # SW 6462620
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL103 SDG#: DE281-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	520		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	170	U 170	520		1
04688	Phenol	108-95-2	17	U 17	170		1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	170		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	170		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70	U 0.70	1.7		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.7		1
10138	Anthracene	120-12-7	0.35	U 0.35	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.70	U 0.70	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.70	U 0.70	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	0.96	J 0.70	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	0.74	J 0.70	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U 0.70	1.7		1
10138	Butylbenzylphthalate	85-68-7	7.3	J 6.3	19		1
10138	Di-n-butylphthalate	84-74-2	9.8	J 6.3	19		1
10138	Chrysene	218-01-9	1.1	J 0.35	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U 0.70	1.7		1
10138	Dimethylphthalate	131-11-3	6.3	U 6.3	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	30	6.3	19		1
10138	Fluoranthene	206-44-0	0.70	U 0.70	1.7		1
10138	Fluorene	86-73-7	0.70	U 0.70	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U 0.70	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.70	U 0.70	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.70	U 0.70	1.7		1
10138	Naphthalene	91-20-3	0.70	U 0.70	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U 0.70	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.3	U 6.3	19		1
10138	Phenanthrene	85-01-8	1.3	J 0.70	1.7		1
10138	Pyrene	129-00-0	0.73	J 0.70	1.7		1
GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U 0.2	1.1		26.88
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	62	U 62	120	10000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-010-SA3-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-010-SA3-SB

LLI Sample # SW 6462620
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL103 SDG#: DE281-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	41 U	41	120	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	82 U	82	250	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	82 U	82	250	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	41 U	41	120	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	41 U	41	120	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	41 U	41	120	1000000 0	1
10132	HMX	2691-41-0	100 U	100	310	1000000 0	1
10132	Nitrobenzene	98-95-3	41 U	41	120	1000000 0	1
10132	Nitroglycerin	55-63-0	820 U	820	2,500	1000000 0	1
10132	2-Nitrotoluene	88-72-2	82 U	82	120	1000000 0	1
10132	3-Nitrotoluene	99-08-1	100 U	100	120	1000000 0	1
10132	4-Nitrotoluene	99-99-0	82 U	82	120	1000000 0	1
10132	PETN	78-11-5	820 U	820	2,500	1000000 0	1
10132	RDX	121-82-4	51 U	51	120	1000000 0	1
10132	Tetryl	479-45-8	63 U	63	120	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	41 U	41	120	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	41 U	41	120	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	20a Formaldehyde 8315A	50-00-0	4,200	1,300	3,100		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	10 U	10	35		10
10225	Aroclor 5442	12642-23-8	10 U	10	35		10
10225	Aroclor 5460	11126-42-4	31 J	10	35		10
10225	PCB-1016	12674-11-2	3.5 U	3.5	18		10
10225	PCB-1221	11104-28-2	3.5 U	3.5	18		10
10225	PCB-1232	11141-16-5	3.5 U	3.5	18		10
10225	PCB-1242	53469-21-9	3.5 U	3.5	18		10
10225	PCB-1248	12672-29-6	3.5 U	3.5	18		10
10225	PCB-1254	11097-69-1	15 J	3.5	18		10
10225	PCB-1260	11096-82-5	33	4.1	18		10

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-010-SA3-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-010-SA3-SB

LLI Sample # SW 6462620
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL103 SDG#: DE281-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	3.5 U	3.5	18		10
10225	PCB-1268	11100-14-4	3.5 U	3.5	18		10
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	100 U	100	520		1
10501	Isopropanol	67-63-0	100 U	100	520		1
10501	Methanol	67-56-1	100 U	100	520		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.2 U	5.2	10		1
08283	Ethylene glycol	107-21-1	5.2 U	5.2	10		1
08283	Propylene glycol	57-55-6	5.2 U	5.2	10		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.7		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.7		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.7		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	4.2 U	4.2	13		10
10199	EFH (C15-C20)	n.a.	4.2 U	4.2	13		10
10199	EFH (C21-C30)	n.a.	18	4.2	13		10
10199	EFH (C30 - C40)	n.a.	170	4.2	13		10
10199	EFH (C8-C11)	n.a.	4.2 U	4.2	13		10
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,500	6.34	21.0		1
07914	Boron	7440-42-8	3.35 J	0.377	5.24		1
01650	Calcium	7440-70-2	2,680	2.62	21.0		1
01654	Iron	7439-89-6	21,700	2.74	21.0		1
01656	Lithium	7439-93-2	24.9	0.65	2.1		1
01657	Magnesium	7439-95-4	5,120	0.461	10.5		1
06958	Manganese	7439-96-5	250	0.0377	0.524		1
10145	Phosphorus	7723-14-0	393	0.367	10.5		1
01662	Potassium	7440-09-7	3,350	11.8	52.4		1
01667	Sodium	7440-23-5	263	6.24	105		1
07968	Strontium	7440-24-6	15.1	0.0262	0.524		1
06969	Tin	7440-31-5	2.79 J	0.335	10.5		1
06970	Titanium	7440-32-6	1,150	0.0744	1.05		1
10146	Zirconium	7440-67-7	2.91 J	0.482	5.24		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.149 J	0.0753	0.204		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-010-SA3-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-010-SA3-SB

LLI Sample # SW 6462620
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL103 SDG#: DE281-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.73	0.0814	0.407		2
06126	Barium	7440-39-3	113	0.108	0.407		2
06127	Beryllium	7440-41-7	0.596	0.0163	0.102		2
06128	Cadmium	7440-43-9	0.501	0.0448	0.102		2
06131	Chromium	7440-47-3	26.9	0.122	0.407		2
06132	Cobalt	7440-48-4	7.54	0.0204	0.102		2
06133	Copper	7440-50-8	1,460	0.814	4.07		20
06135	Lead	7439-92-1	10.9	0.0104	0.204		2
06138	Molybdenum	7439-98-7	0.650	0.0509	0.102		2
06139	Nickel	7440-02-0	18.2	0.102	0.407		2
06141	Selenium	7782-49-2	0.172 J	0.0590	0.407		2
06142	Silver	7440-22-4	0.230	0.0145	0.102		2
06145	Thallium	7440-28-0	0.321	0.0305	0.102		2
06148	Vanadium	7440-62-2	45.8	0.0224	0.102		2
06149	Zinc	7440-66-6	76.5	0.570	3.05		2
SW-846 7471A							
00159	Mercury	7439-97-6	0.0143 J	0.0074	0.105		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.4	0.85	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	4.3	0.85	1.6		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.4		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.31 J	0.21	1.0		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	16a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.52		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	17a pH by 9045C	n.a.	8.41	0.0100	0.0100		1
	Wet Chemistry						
	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	4.6	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-010-SA3-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-010-SA3-SB

LLI Sample # SW 6462620
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL103 SDG#: DE281-05

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-010-SA3-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11313SLF026	11/17/2011 06:41	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11318SLA026	11/27/2011 05:28	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11318SLB026	11/29/2011 13:08	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11313SLF026	11/10/2011 11:45	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11318SLB026	11/14/2011 18:10	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	11318SLA026	11/14/2011 18:30	Sally L Appleyard	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11313A16A	11/10/2011 00:50	Marie D John	26.88
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201131226126	11/08/2011 16:18	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035	2	201131226126	11/08/2011 16:19	Lois E Hiltz	n.a.
10132	15a Energetics by 8330A	SW-846 8330A	1	113190001A	11/19/2011 04:14	James H Place	1
04173	20a Formaldehyde 8315A	SW-846 8315A	1	113180003A	11/16/2011 15:35	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	113150020A	11/16/2011 08:40	Jessica L Miller	10
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	113150020A	11/11/2011 16:00	JoElla L Rice	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	113180003A	11/14/2011 14:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	113190001A	11/15/2011 14:00	Wanda F Oswald	1
10501	18a Alcohols by 8015B	SW-846 8015B	1	113130024A	11/11/2011 01:22	Elizabeth J Marin	1
08283	19a Glycols by 8015B modified	SW-846 8015B	1	113200029A	11/16/2011 22:33	Tyler O Griffin	1
10318	22a Terphenyls by 8015B	SW-846 8015B	1	113180012A	11/15/2011 17:26	Robert Brown	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	113190011A	11/17/2011 23:10	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	113190011A	11/15/2011 16:15	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	113180012A	11/14/2011 18:00	David S Schrum	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	113130024A	11/10/2011 19:00	Lei Yin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	113200029A	11/16/2011 16:30	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-010-SA3-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-010-SA3-SB

LLI Sample # SW 6462620
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

SL103 SDG#: DE281-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
10146	Zirconium	SW-846 6010B	1	113125708003	11/10/2011 07:53	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	113121026003D	11/16/2011 15:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	113121026003A	11/19/2011 20:42	Choon Y Tian	20
06135	Lead	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	113121026003C	11/16/2011 15:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	113121026003B	11/16/2011 15:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	113121026003A	11/16/2011 15:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	113125711003	11/09/2011 17:36	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	113125708003	11/09/2011 10:56	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	113121026003	11/09/2011 11:35	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	113125711003	11/09/2011 12:16	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11313621201A	11/09/2011 16:34	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11313621201A	11/09/2011 16:34	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11313621202A	11/09/2011 17:37	Elyse P Brunstetter	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11322243201A	11/19/2011 10:09	Elyse P Brunstetter	1
05895	16a Cyanide by 9012B	SW-846 9012B	1	11320102202A	11/17/2011 08:46	K Robert Caulfeild-James	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11313621201A	11/09/2011 06:05	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11313621202A	11/09/2011 06:10	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11320102202A	11/16/2011 15:00	Carolyn M Mastropietro	1
00394	17a pH by 9045C	SW-846 9045C modified	1	11319039401A	11/15/2011 09:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11322243201A	11/18/2011 08:40	Yolunder Y Bunch	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11335162401A	12/01/2011 22:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: EB-SA3-SB-110711 Water
SSFL Area IV Collocated Soil Sampling
EB-SA3-SB

LLI Sample # WW 6462621
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

EB117 SDG#: DE281-06EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	2.25	0.538	1.08		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11316WAD026	11/17/2011 07:20	Matthew S Woods	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11316WAD026	11/14/2011 05:30	David V Hershey Jr	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: TB-110711 Sand
SSFL Area IV Collocated Soil Sampling
TB

LLI Sample # SW 6462622
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

TBS07 SDG#: DE281-07TB

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	16.7 U	16.7	33.3		1
The internal standard peak areas were outside of QC limits in the method blank and LCS associated with this sample. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
Wet Chemistry EPA 160.3 modified			%	%	%	%	
11624	Moisture Content by 160.3	n.a.	0.50 U	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	21a NDMA by 1625C	EPA 1625C	1	11313SLF026	11/17/2011 07:00	Matthew S Woods	1
11630	NDMA Soil Microwave	SW-846 3546	1	11313SLF026	11/10/2011 11:45	Kelli M Barto	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11315162401B	11/11/2011 22:24	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: TB-110711 Water
SSFL Area IV Collocated Soil Sampling
TB

LLI Sample # WW 6462623
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

TBV07 SDG#: DE281-08TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC Volatiles	TPH GRO SW-8015B		ug/l	ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	11313A20A	11/09/2011 14:21	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	11313A20A	11/09/2011 14:21	Marie D John	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 1 of 1

Sample Description: TB-110711 Water
SSFL Area IV Collocated Soil Sampling
TB

LLI Sample # WW 6462624
LLI Group # 1275265
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 11/07/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 11/08/2011 09:20

Reported: 12/05/2011 13:13

TBN07 SDG#: DE281-09TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	0.478 U	0.478	0.956		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	21b NDMA by 1625C	EPA 1625C	1	11316WAD026	11/17/2011 07:39	Matthew S Woods	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11316WAD026	11/14/2011 05:30	David V Hershey Jr	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11313SLF026 N-Nitrosodimethylamine	Sample number(s): 6462617-6462620, 6462622 16.7 U	16.7	33.3	ng/kg	89		70-130		
Batch number: 11316WAD026 N-Nitrosodimethylamine	Sample number(s): 6462621, 6462624 0.500 U	0.500	1.00	ng/l	97	91	70-130	6	30
Batch number: 11318SLA026 Aniline	Sample number(s): 6462616-6462620 170 U	170.	500	ug/kg	71		20-115		
Benzidine	1,200 U	1,200.	3,300	ug/kg	50		15-121		
Benzoic acid	170 U	170.	500	ug/kg	82		62-113		
Benzyl alcohol	170 U	170.	500	ug/kg	89		68-111		
4-Bromophenyl-phenylether	17 U	17.	170	ug/kg	95		73-114		
Carbazole	17 U	17.	170	ug/kg	92		77-113		
4-Chloro-3-methylphenol	33 U	33.	170	ug/kg	96		74-119		
4-Chloroaniline	67 U	67.	170	ug/kg	40		10-110		
bis(2-Chloroethoxy)methane	17 U	17.	170	ug/kg	93		70-118		
bis(2-Chloroethyl)ether	17 U	17.	170	ug/kg	87		70-104		
bis(2-Chloroisopropyl)ether	17 U	17.	170	ug/kg	90		62-115		
2-Chloronaphthalene	17 U	17.	170	ug/kg	93		49-128		
2-Chlorophenol	17 U	17.	170	ug/kg	95		72-112		
4-Chlorophenyl-phenylether	33 U	33.	170	ug/kg	94		74-115		
Dibenzofuran	17 U	17.	170	ug/kg	91		74-116		
1,2-Dichlorobenzene	17 U	17.	170	ug/kg	86		74-99		
1,3-Dichlorobenzene	17 U	17.	170	ug/kg	84		70-98		
1,4-Dichlorobenzene	17 U	17.	170	ug/kg	85		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	38		10-116		
2,4-Dichlorophenol	17 U	17.	170	ug/kg	97		75-111		
Diethylphthalate	17 U	17.	170	ug/kg	95		76-111		
2,4-Dimethylphenol	33 U	33.	170	ug/kg	95		72-111		
3,5-Dimethylphenol	33 U	33.	170	ug/kg	94		83-120		
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	71		46-120		
2,4-Dinitrophenol	330 U	330.	1,000	ug/kg	50		18-133		
2,4-Dinitrotoluene	33 U	33.	170	ug/kg	95		73-115		
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	98		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	95		71-125		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	87		75-117		
Hexachlorobenzene	17 U	17.	170	ug/kg	95		73-119		
Hexachlorobutadiene	67 U	67.	170	ug/kg	87		65-117		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	79		46-115		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Hexachloroethane	17	U	17.	170	ug/kg	81	61-109		
Isophorone	17	U	17.	170	ug/kg	92	69-110		
2-Methylphenol	33	U	33.	170	ug/kg	96	66-110		
4-Methylphenol	33	U	33.	170	ug/kg	94	66-117		
2-Nitroaniline	17	U	17.	170	ug/kg	91	78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	89	62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	70	49-98		
Nitrobenzene	17	U	17.	170	ug/kg	91	66-119		
2-Nitrophenol	17	U	17.	170	ug/kg	88	76-111		
4-Nitrophenol	170	U	170.	500	ug/kg	80	56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	84	63-107		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	97	67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	101	62-137		
Pentachlorophenol	170	U	170.	500	ug/kg	85	51-117		
Phenol	17	U	17.	170	ug/kg	98	58-112		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	90	73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	92	76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	94	78-111		
Batch number: 11318SLB026	Sample number(s): 6462616-6462620								
Acenaphthene	0.67	U	0.67	1.7	ug/kg	97	63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	99	60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	100	73-113		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	100	74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	99	58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	101	63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	107	66-150		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	100	54-142		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	105	65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	123	75-137		
Chrysene	0.33	U	0.33	1.7	ug/kg	101	73-114		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	105	53-138		
Diethylphthalate	6.0	U	6.0	18	ug/kg	117	68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	109	79-121		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	119	67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	102	64-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	105	71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	105	56-134		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	94	72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	93	62-120		
Naphthalene	0.67	U	0.67	1.7	ug/kg	96	67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	90	55-118		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	96	68-162		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	97	75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	97	72-119		
Batch number: 11313A16A	Sample number(s): 6462617-6462618, 6462620								
9a TPH by EPA 8015B Gas C5-C12	0.2	U	0.2	1.0	mg/kg	78	67-119	10	30
Batch number: 11313A20A	Sample number(s): 6462623								
TPH-GRO S.CA water C5-C12	20	U	20.	50	ug/l	109	75-135	9	30
Batch number: 113190001A	Sample number(s): 6462617-6462620								
4-Amino-2,6-Dinitrotoluene	60	U	60.	120	ug/kg	107	80-120		
2-Amino-4,6-Dinitrotoluene	40	U	40.	120	ug/kg	106	80-120		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Diamino-4-nitrotoluene	80 U	80.	240	ug/kg	96	90	54-134	6	30
2,4-Diamino-6-nitrotoluene	80 U	80.	240	ug/kg	96	90	54-134	6	30
1,3-Dinitrobenzene	40 U	40.	120	ug/kg	110		51-171		
2,4-Dinitrotoluene	40 U	40.	120	ug/kg	102		72-135		
2,6-Dinitrotoluene	40 U	40.	120	ug/kg	103		80-120		
HMX	100 U	100.	300	ug/kg	91		74-130		
Nitrobenzene	40 U	40.	120	ug/kg	94		80-120		
Nitroglycerin	800 U	800.	2,400	ug/kg	96		80-120		
2-Nitrotoluene	80 U	80.	120	ug/kg	102		78-128		
3-Nitrotoluene	100 U	100.	120	ug/kg	106		73-127		
4-Nitrotoluene	80 U	80.	120	ug/kg	99		80-120		
PETN	800 U	800.	2,400	ug/kg	104		80-120		
RDX	50 U	50.	120	ug/kg	103		75-131		
Tetryl	61 U	61.	120	ug/kg	130		70-168		
1,3,5-Trinitrobenzene	40 U	40.	120	ug/kg	104		77-137		
2,4,6-Trinitrotoluene	40 U	40.	120	ug/kg	109		80-120		
Batch number: 113180003A	Sample number(s): 6462617-6462620								
20a Formaldehyde 8315A	600 U	600.	1,500	ug/kg	99		80-126		
Batch number: 113150020A	Sample number(s): 6462616-6462620								
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	71	71	36-106	0	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	79		72-120		
PCB-1221	0.33 U	0.33	1.7	ug/kg					
PCB-1232	0.33 U	0.33	1.7	ug/kg					
PCB-1242	0.33 U	0.33	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.39 U	0.39	1.7	ug/kg	86		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 113130024A	Sample number(s): 6462617-6462620								
Ethanol	100 U	100.	500	ug/kg	100		71-129		
Isopropanol	100 U	100.	500	ug/kg	96		75-125		
Methanol	100 U	100.	500	ug/kg	102		68-129		
Batch number: 113200029A	Sample number(s): 6462617-6462620								
Diethylene glycol	5.0 U	5.0	10	mg/kg	100		75-125		
Ethylene glycol	5.0 U	5.0	10	mg/kg	106		53-149		
Propylene glycol	5.0 U	5.0	10	mg/kg	99		67-131		
Batch number: 113180012A	Sample number(s): 6462617-6462620								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	98		64-111		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	99		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	98		69-109		
Batch number: 113190011A	Sample number(s): 6462617-6462620								

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	101		70-123		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	108		75-128		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	105		64-134		
EFH (C30 - C40)	0.40 U	0.40	1.2	mg/kg	115		65-128		
EFH (C8-C11)	0.40 U	0.40	1.2	mg/kg	89		49-107		

Batch number: 113121026003A

Sample number(s): 6462616-6462620

Antimony	0.0725 U	0.0725	0.196	mg/kg	72		40-227		
Arsenic	0.0784 U	0.0784	0.392	mg/kg	101		83-111		
Beryllium	0.0157 U	0.0157	0.0980	mg/kg	100		84-112		
Cadmium	0.0431 U	0.0431	0.0980	mg/kg	101		83-111		
Chromium	0.118 U	0.118	0.392	mg/kg	104		77-123		
Cobalt	0.0196 U	0.0196	0.0980	mg/kg	99		85-114		
Copper	0.0784 U	0.0784	0.392	mg/kg	97		81-110		
Lead	0.0307 J	0.0100	0.196	mg/kg	99		84-112		
Nickel	0.0980 U	0.0980	0.392	mg/kg	101		81-110		
Silver	0.0139 U	0.0139	0.0980	mg/kg	100		83-112		
Thallium	0.0294 U	0.0294	0.0980	mg/kg	103		82-112		
Vanadium	0.0216 U	0.0216	0.0980	mg/kg	95		76-110		
Zinc	0.549 U	0.549	2.94	mg/kg	101		82-110		

Batch number: 113121026003B

Sample number(s): 6462616-6462620

Selenium	0.0569 U	0.0569	0.392	mg/kg	95		79-110		

Batch number: 113121026003C

Sample number(s): 6462616-6462620

Molybdenum	0.0490 U	0.0490	0.0980	mg/kg	102		80-110		

Batch number: 113121026003D

Sample number(s): 6462616-6462620

Barium	0.104 U	0.104	0.392	mg/kg	101		83-110		

Batch number: 113125708003

Sample number(s): 6462616-6462620

Aluminum	5.99 U	5.99	19.8	mg/kg	82		40-127		
Boron	0.356 U	0.356	4.95	mg/kg	98		83-110		
Calcium	4.28 J	2.48	19.8	mg/kg	96		81-110		
Iron	2.99 J	2.58	19.8	mg/kg	84		47-129		
Lithium	0.61 U	0.61	2.0	mg/kg	99		80-120		
Magnesium	0.884 J	0.436	9.90	mg/kg	87		63-116		
Manganese	0.0356 U	0.0356	0.495	mg/kg	98		85-116		
Phosphorus	1.18 J	0.347	9.90	mg/kg	102		80-120		
Potassium	11.2 U	11.2	49.5	mg/kg	96		71-110		
Sodium	5.89 U	5.89	99.0	mg/kg	98		76-110		
Strontium	0.0248 U	0.0248	0.495	mg/kg	96		84-110		
Tin	1.51 J	0.317	9.90	mg/kg	94		86-120		
Titanium	0.0703 U	0.0703	0.990	mg/kg	82		80-120		
Zirconium	0.455 U	0.455	4.95	mg/kg	101		80-120		

Batch number: 113125711003

Sample number(s): 6462616-6462620

Mercury	0.0069 U	0.0069	0.0976	mg/kg	84		83-119		

Batch number: 11313621201A

Sample number(s): 6462616-6462620

11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	106		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	107		90-110		

Batch number: 11313621202A

Sample number(s): 6462616-6462620

7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	99		85-115		

Batch number: 11320102202A

Sample number(s): 6462617-6462620

16a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	92		80-120		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11322243201A 3a Cr VI by EPA 7199	Sample number(s): 6462616-6462620 0.20 U 0.20	1.0	mg/kg	85			80-120		
Batch number: 11319039401A 17a pH by 9045C	Sample number(s): 6462616-6462620			100			95-105		
Batch number: 11315162401B Moisture Content by 160.3	Sample number(s): 6462616,6462622			100			80-120		
Batch number: 11335162401A Moisture Content by 160.3	Sample number(s): 6462617-6462620			99			80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11313SLF026 N-Nitrosodimethylamine	Sample number(s): 6462617-6462620,6462622 UNSPK: P457188	84	83	70-130	1	30			
Batch number: 11318SLA026	Sample number(s): 6462616-6462620 UNSPK: P461454								
Aniline	53	73	18-116	32*	30				
Benzidine	0*	0*	35-141	0	30				
Benzoic acid	42	50	10-173	18	30				
Benzyl alcohol	89	98	67-115	9	30				
4-Bromophenyl-phenylether	91	100	67-129	10	30				
Carbazole	87	96	64-120	10	30				
4-Chloro-3-methylphenol	92	100	62-122	8	30				
4-Chloroaniline	37	68	13-107	58*	30				
bis(2-Chloroethoxy)methane	86	96	75-104	10	30				
bis(2-Chloroethyl)ether	83	92	60-116	10	30				
bis(2-Chloroisopropyl)ether	87	96	55-142	9	30				
2-Chloronaphthalene	88	93	50-141	6	30				
2-Chlorophenol	94	104	73-121	10	30				
4-Chlorophenyl-phenylether	91	99	80-109	9	30				
Dibenzofuran	88	96	71-112	8	30				
1,2-Dichlorobenzene	83	88	66-108	6	30				
1,3-Dichlorobenzene	80	87	63-109	8	30				
1,4-Dichlorobenzene	82	88	58-108	7	30				
3,3'-Dichlorobenzidine	46	64	28-109	33*	30				
2,4-Dichlorophenol	93	104	66-123	10	30				
Diethylphthalate	90	98	66-118	8	30				
2,4-Dimethylphenol	91	100	68-118	9	30				
3,5-Dimethylphenol	88	97	71-127	9	30				
4,6-Dinitro-2-methylphenol	52	60	11-126	14	30				
2,4-Dinitrophenol	30	34	20-143	14	30				
2,4-Dinitrotoluene	90	97	56-129	7	30				
2,6-Dinitrotoluene	93	101	69-123	9	30				
1,2-Diphenylhydrazine	91	103	71-129	12	30				
bis(2-Ethylhexyl)phthalate	85	95	63-122	11	30				
Hexachlorobenzene	90	102	77-114	12	30				

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Hexachlorobutadiene	84	91	62-120	8	30				
Hexachlorocyclopentadiene	76	86	10-153	12	30				
Hexachloroethane	79	85	57-109	7	30				
Isophorone	86	94	73-102	9	30				
2-Methylphenol	93	104	75-111	11	30				
4-Methylphenol	92	102	59-123	10	30				
2-Nitroaniline	90	99	67-125	10	30				
3-Nitroaniline	84	95	59-122	12	30				
4-Nitroaniline	65	79	41-109	19	30				
Nitrobenzene	86	94	57-125	8	30				
2-Nitrophenol	88	96	56-127	9	30				
4-Nitrophenol	77	85	37-129	9	30				
N-Nitroso-di-n-propylamine	81	89	60-116	10	30				
N-Nitrosodiphenylamine	91	102	71-122	11	30				
Di-n-octylphthalate	107	120	56-126	12	30				
Pentachlorophenol	70	75	28-127	6	30				
Phenol	94	104	58-126	10	30				
1,2,4-Trichlorobenzene	85	92	72-115	8	30				
2,4,5-Trichlorophenol	90	100	58-129	10	30				
2,4,6-Trichlorophenol	93	102	56-134	9	30				

Batch number: 11318SLB026 Sample number(s): 6462616-6462620 UNSPK: 6462616

Acenaphthene	97	93	63-105	4	30
Acenaphthylene	96	96	67-114	0	30
Anthracene	96	99	73-115	3	30
Benzo(a)anthracene	98	100	59-128	2	30
Benzo(a)pyrene	96	97	58-142	1	30
Benzo(b)fluoranthene	116	117	54-163	1	30
Benzo(g,h,i)perylene	77	77	33-141	0	30
Benzo(k)fluoranthene	91	91	57-153	0	30
Butylbenzylphthalate	105	110	57-173	5	30
Di-n-butylphthalate	105	108	65-148	2	30
Chrysene	92	95	67-123	3	30
Dibenz(a,h)anthracene	86	87	22-133	0	30
Diethylphthalate	110	113	70-136	2	30
Dimethylphthalate	100	104	74-118	4	30
Bis(2-Ethylhexyl)phthalate	64	71	39-167	5	30
Fluoranthene	101	103	51-149	2	30
Fluorene	98	98	66-122	1	30
Indeno(1,2,3-cd)pyrene	84	84	21-143	0	30
1-Methylnaphthalene	92	92	72-123	1	30
2-Methylnaphthalene	90	91	64-103	1	30
Naphthalene	93	94	61-102	2	30
N-Nitrosodimethylamine	86	84	48-113	3	30
Di-n-octylphthalate	98	98	40-192	0	30
Phenanthrene	93	96	62-122	3	30
Pyrene	89	92	51-131	3	30

Batch number: 113190001A Sample number(s): 6462617-6462620 UNSPK: 6462617

4-Amino-2,6-Dinitrotoluene	79*	92	80-127	15	50
2-Amino-4,6-Dinitrotoluene	76*	88	80-137	15	50
1,3-Dinitrobenzene	83	93	38-166	11	50
2,4-Dinitrotoluene	76*	86	80-131	13	50

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2,6-Dinitrotoluene	78*	89	80-127	13	50				
HMX	63	76	63-128	19	50				
Nitrobenzene	80	81	80-125	0	50				
Nitroglycerin	73*	84	80-120	15	50				
2-Nitrotoluene	79*	87	80-122	9	50				
3-Nitrotoluene	83	92	72-119	10	50				
4-Nitrotoluene	78*	85	80-125	9	50				
PETN	75*	89	80-121	18	50				
RDX	70*	83	75-129	16	50				
Tetryl	75	104	55-174	33	50				
1,3,5-Trinitrobenzene	74*	86	82-126	15	50				
2,4,6-Trinitrotoluene	79*	91	82-130	14	50				
Batch number: 113180003A	Sample number(s): 6462617-6462620 UNSPK: 6462617								
20a Formaldehyde 8315A	98	94	80-120	4	50				
Batch number: 113150020A	Sample number(s): 6462616-6462620 UNSPK: P465418								
PCB-1016	74	79	29-146	7	50				
PCB-1260	85	94	39-149	10	50				
Batch number: 113130024A	Sample number(s): 6462617-6462620 UNSPK: 6462617								
Ethanol	98	48	48-130	68*	20				
Isopropanol	94	41	12-149	78*	20				
Methanol	98	47	43-138	70*	20				
Batch number: 113200029A	Sample number(s): 6462617-6462620 UNSPK: P461456								
Diethylene glycol	23*	22*	59-109	4	20				
Ethylene glycol	64	65	63-107	1	20				
Propylene glycol	73	73	63-107	1	20				
Batch number: 113180012A	Sample number(s): 6462617-6462620 UNSPK: P461454								
m-Terphenyl	101	100	75-125	1	20				
o-Terphenyl	102	101	75-125	1	20				
p-Terphenyl	101	100	75-125	1	20				
Batch number: 113190011A	Sample number(s): 6462617-6462620 UNSPK: 6462617								
EFH (C12-C14)	85	98	49-123	14	20				
EFH (C15-C20)	99	108	49-123	8	20				
EFH (C21-C30)	102	111	49-123	9	20				
EFH (C30 - C40)	73	86	49-123	11	20				
EFH (C8-C11)	71	79	49-123	10	20				
Batch number: 113121026003A	Sample number(s): 6462616-6462620 UNSPK: 6462618 BKG: 6462618								
Antimony	49*	46*	75-125	11	20	0.0725 U	0.0740 U	0 (1)	20
Arsenic	117	117	75-125	1	20	5.61	6.29	11	20
Beryllium	102	142*	75-125	19	20	0.486	0.668	32* (1)	20
Cadmium	133*	120	75-125	14	20	0.0431 U	0.0440 U	0 (1)	20
Chromium	123	122	75-125	2	20	16.2	18.9	15	20
Cobalt	125	123	75-125	5	20	4.94	6.27	24*	20
Copper	123	117	75-125	6	20	6.06	7.36	19	20
Lead	141*	128*	75-125	6	20	5.19	6.06	16	20
Nickel	132*	124	75-125	6	20	7.96	8.93	11	20
Silver	133*	122	75-125	12	20	0.0197 J	0.0186 J	6 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Thallium	123	110	75-125	8	20	0.384	0.375	2 (1)	20
Vanadium	127*	131*	75-125	0	20	33.3	38.7	15	20
Zinc	171 (2)	107 (2)	75-125	10	20	52.3	60.9	15	20
Batch number: 113121026003B	Sample number(s): 6462616-6462620 UNSPK: 6462618 BKG: 6462618								
Selenium	83	85	75-125	1	20	0.132 J	0.158 J	18 (1)	20
Batch number: 113121026003C	Sample number(s): 6462616-6462620 UNSPK: 6462618 BKG: 6462618								
Molybdenum	124	119	75-125	8	20	0.328	0.346	5 (1)	20
Batch number: 113121026003D	Sample number(s): 6462616-6462620 UNSPK: 6462618 BKG: 6462618								
Barium	171 (2)	158 (2)	75-125	3	20	51.7	61.2	17	20
Batch number: 113125708003	Sample number(s): 6462616-6462620 UNSPK: 6462616 BKG: 6462616								
Aluminum	2025 (2)	1242 (2)	75-125	10	20	11,800	11,600	1	20
Boron	96	97	84-115	1	20	3.38 J	2.86 J	17 (1)	20
Calcium	173*	119	75-125	13	20	1,040	1,080	4	20
Iron	2906 (2)	-415 (2)	75-125	18	20	16,800	16,300	3	20
Lithium	98	97	82-114	1	20	22.6	21.2	6	20
Magnesium	430 (2)	117 (2)	75-125	18	20	2,750	2,730	1	20
Manganese	90	113	75-125	5	20	188	178	5	20
Phosphorus	123	90	75-125	10	20	219	216	1	20
Potassium	133*	86	75-125	11	20	3,080	2,810	9	20
Sodium	99	97	75-125	1	20	86.6 J	85.3 J	1 (1)	20
Strontium	100	99	75-115	1	20	10.5	10.9	4	20
Tin	87	88	80-110	1	20	2.58 J	2.53 J	2 (1)	20
Titanium	168 (2)	99 (2)	75-125	6	20	937	871	7	20
Zirconium	94	95	81-110	1	20	2.12 J	2.87 J	30* (1)	20
Batch number: 113125711003	Sample number(s): 6462616-6462620 UNSPK: 6462620 BKG: 6462620								
Mercury	92	91	65-135	1	20	0.0136 J	0.0138 J	1 (1)	20
Batch number: 11313621201A	Sample number(s): 6462616-6462620 UNSPK: 6462616 BKG: 6462616								
11a Anions by 300.0 - Fluoride	88		80-120			0.80 U	1.3	200* (1)	20
11a Anions by 300.0 - Nitrate	91		80-120			2.0	2.1	1 (1)	20
Batch number: 11313621202A	Sample number(s): 6462616-6462620 UNSPK: P461454 BKG: P461454								
7a Perchlorate EPA 314.0	103		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11320102202A	Sample number(s): 6462617-6462620 UNSPK: 6462617 BKG: 6462617								
16a Cyanide by 9012B	100		75-125			0.18 U	0.18 U	0 (1)	20
Batch number: 11322243201A	Sample number(s): 6462616-6462620 UNSPK: P465418 BKG: P465418								
3a Cr VI by EPA 7199	95		75-125			0.20 U	0.69 J	200* (1)	20
Batch number: 11319039401A	Sample number(s): 6462616-6462620 BKG: P461454								
17a pH by 9045C						8.53	8.53	0	3
Batch number: 11315162401B	Sample number(s): 6462616, 6462622 BKG: P463912								
Moisture Content by 160.3						0.50 U	0.50 U	0 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11335162401A	Sample number(s): 6462617-6462620					BKG: 6462618			
Moisture Content by 160.3						6.2	5.9	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21a NDMA by 1625C
Batch number: 11313SLF026
N-Nitrosodimethylamine-
d6

6462617	135
6462618	138
6462619	113
6462620	120
6462622	119
Blank	136
LCS	148
MS	133
MSD	138

Limits: 50-150

Analysis Name: 21b. NDMA in Water
Batch number: 11316WAD026
N-Nitrosodimethylamine-
d6

6462621	124
6462624	117
Blank	137
LCS	134
LCSD	140

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 11318SLA026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6462616	101	102	83	85	93	87
6462617	98	99	84	85	90	90
6462618	100	102	84	88	93	90
6462619	96	99	91	84	91	89
6462620	89	94	88	84	92	87
Blank	92	95	87	85	91	87
LCS	95	97	89	85	87	84
MS	99	102	92	86	91	86

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Surrogate Quality Control

MSD	102	104	94	87	93	88
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11318SLB026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6462616	100	92	98
6462617	97	88	94
6462618	101	92	114
6462619	100	90	94
6462620	106	94	109
Blank	114	105	118
LCS	104	94	99
MS	98	90	96
MSD	103	91	104
Limits:	40-130	45-130	45-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 11313A16A
Trifluorotoluene-F

6462617	86
6462618	95
6462620	95
Blank	97
LCS	84
LCSD	93
Limits:	61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 11313A20A
Trifluorotoluene-F

6462623	93
Blank	93
LCS	120
LCSD	119
Limits:	63-135

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 113150020A
Tetrachloro-m-xylene Decachlorobiphenyl

6462616	104	87
6462617	99	85
6462618	104	90
6462619	94	99
6462620	100	114
Blank	90	97
LCS	89	96
LCSD	96	102
MS	85	88

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Surrogate Quality Control

MSD 93 99

Limits: 53-139 45-120

Analysis Name: 20a Formaldehyde 8315A
Batch number: 113180003A
Butyraldehyde

6462617 77
6462618 79
6462619 90
6462620 73
Blank 95
LCS 85
MS 80
MSD 79

Limits: 64-126

Analysis Name: 15a Energetics by 8330A
Batch number: 113190001A
2-Nitro-m-xylene

6462617 101
6462618 106
6462619 85
6462620 93
Blank 105
LCS 104
LCSD 103
MS 86
MSD 86

Limits: 80-146

Analysis Name: 18a Alcohols by 8015B
Batch number: 113130024A
Acetone

6462617 83
6462618 80
6462619 82
6462620 81
Blank 84
LCS 86
MS 4*
MSD 22*

Limits: 42-138

Analysis Name: 22a Terphenyls by 8015B
Batch number: 113180012A
n-Triacontane-d62

6462617 75
6462618 77
6462619 78

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 12/05/11 at 01:13 PM

Group Number: 1275265

Surrogate Quality Control

6462620 83
Blank 79
LCS 76
MS 78
MSD 78

Limits: 19-152

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel

Batch number: 113190011A

	Chlorobenzene	Orthoterphenyl
6462617	69	84
6462618	68	83
6462619	70	87
6462620	80	97
Blank	71	89
LCS	78	94
MS	68	85
MSD	68	87

Limits: 37-125 47-145

Analysis Name: 19a Glycols by 8015B

Batch number: 113200029A

	Tetramethylene glycol
6462617	91
6462618	93
6462619	87
6462620	91
Blank	102
LCS	102
MS	91
MSD	92

Limits: 29-137

*- Outside of specification

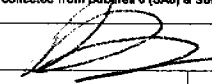
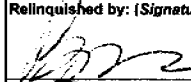
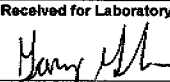
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13013 1275265 6462616-24

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING																								
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetratin under EPA Method 8270C.																										
Samplers Signatures: 																										
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 601060208/7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCB/PCP's EPA 8062	*Dioxin/Furan EPA 1613B	*Pesticides EPA 314.0	*Hex Chroms EPA 7199	*PH EPA 8060/8040B	Perchlorate Confirmation by EPA 8850 (10%)	TPH-GRO EPA 8015B \$	**TPH-EPI EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 8012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	**Desonol EPA 8270	Other Instructions and Notes
SL-001-SA3-SB-2.0-3.0	11.07.11	0925	SOIL	NONE	1-SS Sleeve			X	X																	
SL-001-SA3-SB-2.0-3.0	11.07.11	0925	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X													
SL-004-SA3-SB-4.5	11.07.11	1455	SOIL	NONE	2-Encores										X											
SL-004-SA3-SB-4.0-5.0	11.07.11	1450	SOIL	NONE	1-SS Sleeve			X	X																	
SL-004-SA3-SB-4.0-5.0	11.07.11	1450	SOIL	NONE	2-16 oz Jar	X	X			X	X	X	X			X	X	X	X	X	X	X	X	X	X	
SL-004-SA3-SB-9.5	11.07.11	1530	SOIL	NONE	2-Encores										X											
SL-004-SA3-SB-9.0-10.0	11.07.11	1525	SOIL	NONE	1-SS Sleeve			X	X																	
SL-004-SA3-SB-9.0-10.0	11.07.11	1525	SOIL	NONE	2-16 oz Jar	X	X			X	X	X	X			X	X	X	X	X	X	X	X	X	X	
SL-013-SA3-SB-0.5-1.5	11.07.11	1335	SOIL	NONE	1-SS Sleeve			X	X																	
SL-013-SA3-SB-0.5-1.5	11.07.11	1335	SOIL	NONE	2-16 oz Jar	X	X			X	X	X	X			X	X	X	X	X	X	X	X	X	X	
SL-010-SA3-SB-3.5	11.07.11	1120	SOIL	NONE	2-Encores										X											
SL-010-SA3-SB-3.0-4.0	11.07.11	1115	SOIL	NONE	1-SS Sleeve			X	X																	
SL-010-SA3-SB-3.0-4.0	11.07.11	1115	SOIL	NONE	1-16 oz Jar	X	X			X	X	X	X			X	X	X	X	X	X	X	X	X	X	
EB-SA7-SB-110711	11.07.11	1400	WATER	NONE	1-1 L amber														X							
TB-110711	11.07.11	0800	SOIL	NONE	1-4 oz jar														X							
TB-110711	11.07.11	0800	WATER	NONE	2-40 mL Vials										X											
TB-110711	11.07.11	0800	WATER	NONE	1-1 L amber														X							
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																	Laboratory:					
		11/07/2011 / 1630		 11/8/11 0920																	Lancaster Laboratories, Inc.					
Received by: (Signature)		Date/Time		Airbill No. (S)																						
				87679857 4890																						

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Tuesday, November 08, 2011 12:50 PM
To: Nicole Maljovec
Subject: RE: SSFL COC 11/07/11: ID Discrepancies

The depth on the labels is correct, please use 7.0-8.0

The EB should be EB-SA3-SB-110711

Thanks!

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]
Sent: Tuesday, November 08, 2011 9:44 AM
To: Hartman, Pamela
Subject: FW: SSFL COC 11/07/11: ID Discrepancies

Hi Pam,
I have two quick questions for you.

1. Sample SL-004-SA3-SB-9.0-10.0 have a depth of 7.0-8.0 on the labels. Which should we use?
2. EB-SA7-SB-110711 has SA3 on the labels. Which should we use?

Thanks!
Nicole

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]
Sent: Monday, November 07, 2011 7:02 PM
To: Bloisa, Peggy; Burgess, Todd; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; Zakowski, Cherie; TWallbom@dtsc.ca.gov
Subject: SSFL COC 11/07/11

Subsurface sampling continued in SA3 today with one hand auger crew.
Please see attached COC.

Thanks,

Pam

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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