

Appendix B

Laboratory Reports

(On CD)

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

January 14, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/14/2010

Group Number: 1225222

SDG: DE036

PO Number: 1203-004-007-AL

Release Number: Tracking #11667

State of Sample Origin: CA

Client Sample Description

SL-078-SA5B-SS-0.0-0.5	Soil
SL-084-SA5B-SS-0.0-0.5	Soil
SL-076-SA5B-SS-0.0-0.5	Soil
SL-071-SA5B-SS-0.0-0.5	Soil
SL-071-SA5B-SS-0.0-0.5MS	Soil
SL-071-SA5B-SS-0.0-0.5MSD	Soil
SL-071-SA5B-SS-0.0-0.5DUP	Soil
SL-139-SA5B-SS-0.0-0.5	Soil
SL-083-SA5B-SS-0.0-0.5	Soil
SL-074-SA5B-SS-0.0-0.5	Soil
SL-301-SA5B-SS-0.0-0.5	Soil
SL-073-SA5B-SS-0.0-0.5	Soil
SL-072-SA5B-SS-0.0-0.5	Soil
DUP04-SA5B-QC-121310	Soil
SED-029-SIV-SD-0.0-0.5	Soil
SED-031-SIV-SD-0.0-0.5	Soil
SED-030-SIV-SD-0.0-0.5	Soil
SED-040-SIV-SD-0.0-0.5	Soil
SL-086-SA5B-SS-0.0-0.5	Soil
SL-092-SA5B-SS-0.0-0.5	Soil
SL-103-SA5B-SS-0.0-0.5	Soil
SL-089-SA5B-SS-0.0-0.5	Soil
SL-236-SA5B-SS-0.0-0.5	Soil

Lancaster Labs (LLI) #

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

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

Attn: Todd Burgesser

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

Respectfully Submitted,



Chad A. Moline
Group Leader

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL078 SDG#: DE036-01

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL078 SDG#: DE036-01

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

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Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL078 SDG#: DE036-01

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

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Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL078 SDG#: DE036-01

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

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

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

LLI Sample # SW 6163596
LLI Group # 1225222
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Collected: 12/13/2010 11:10

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Submitted: 12/14/2010 10:05

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SL078 SDG#: DE036-01

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL078 SDG#: DE036-01

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL084 SDG#: DE036-02

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL084 SDG#: DE036-02

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

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

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

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL084 SDG#: DE036-02

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

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Submitted: 12/14/2010 10:05

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SL084 SDG#: DE036-02

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

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SL084 SDG#: DE036-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.66	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.6	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL084 SDG#: DE036-02

Laboratory Sample Analysis Record

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL076 SDG#: DE036-03

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL076 SDG#: DE036-03

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

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

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

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL076 SDG#: DE036-03

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL076 SDG#: DE036-03

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL076 SDG#: DE036-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry			Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.49	0.0100	0.0100	1
Wet Chemistry			%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.9	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL076 SDG#: DE036-03

Laboratory Sample Analysis Record

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04BKG

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04BKG

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

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

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

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04BKG

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04BKG

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04BKG

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04BKG

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MS

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MS

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM						
10138	Fluoranthene	206-44-0	53	0.71	1.8	1
10138	Fluorene	86-73-7	33	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	58	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	33	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	29	0.71	1.8	1
10138	Naphthalene	91-20-3	31	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	35	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	36	6.4	19	1
10138	Phenanthrene	85-01-8	39	0.71	1.8	1
10138	Pyrene	129-00-0	45	0.71	1.8	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 8.2 ug/kg. The blank value was not subtracted from the analytical result.						
Herbicides SW-846 8151A						
10401	2,4-D	94-75-7	8.4	1.3	3.8	1
10401	Dalapon	75-99-0	18	4.7	9.6	1
10401	2,4-DB	94-82-6	3.8	0.66	1.8	1
10401	Dicamba	1918-00-9	1.4	0.43	1.3	1
10401	Dinoseb	88-85-7	1.9 J	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	10	0.85	1.8	1
10401	MCPA	94-74-6	1,300	81	270	1
10401	MCPP (Mecoprop)	93-65-2	710	80	270	1
10401	2,4,5-T	93-76-5	0.54	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.72	0.080	0.18	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.44	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.38	0.036	0.18	1
01363	Beta BHC	319-85-7	0.29	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.45	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.85	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.84	0.070	0.36	1
01363	p,p-DDT	50-29-3	1.2	0.070	0.36	1
01363	Delta BHC	319-86-8	0.32	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.30	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.61	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.65	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.76	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.73	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.42	0.036	0.18	1
01363	Methoxychlor	72-43-5	4.7	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MS

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MS

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MS

Laboratory Sample Analysis Record

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

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



Analysis Report

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

Page 7 of 7

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MS

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MSD

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MSD

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

CDM Federal Programs Corp.

Submitted: 12/14/2010 10:05

14420 Albemarle Point Place

Reported: 01/14/2011 23:09

Suite 210

Chantilly VA 20151

SL071 SDG#: DE036-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM						
10138	Fluoranthene	206-44-0	54	0.71	1.8	1
10138	Fluorene	86-73-7	34	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	67	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	33	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	30	0.71	1.8	1
10138	Naphthalene	91-20-3	31	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	36	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	35	6.4	19	1
10138	Phenanthrene	85-01-8	40	0.71	1.8	1
10138	Pyrene	129-00-0	45	0.71	1.8	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 8.2 ug/kg. The blank value was not subtracted from the analytical result.						
Herbicides SW-846 8151A						
10401	2,4-D	94-75-7	6.2	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	4.7	9.6	1
10401	2,4-DB	94-82-6	7.2	0.66	1.8	1
10401	Dicamba	1918-00-9	1.1	0.43	1.3	1
10401	Dinoseb	88-85-7	2.3	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	10	0.85	1.8	1
10401	MCPA	94-74-6	1,500	81	270	1
10401	MCPP (Mecoprop)	93-65-2	540	80	270	1
10401	2,4,5-T	93-76-5	0.27	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.81	0.080	0.18	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.31	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.41	0.036	0.18	1
01363	Beta BHC	319-85-7	0.42	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.44	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.79	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.68	0.070	0.36	1
01363	p,p-DDT	50-29-3	1.7	0.070	0.36	1
01363	Delta BHC	319-86-8	0.43	0.038	0.18	1
01363	Dieldrin	60-57-1	0.90	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.29	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.43	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.81	0.070	0.36	1
01363	Endrin	72-20-8	0.79	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.60	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.48	0.070	0.36	1
01363	Heptachlor	76-44-8	0.41	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.34	0.036	0.18	1
01363	Methoxychlor	72-43-5	4.3	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	0.070	0.36	1

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MSD

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MSD

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04MSD

Laboratory Sample Analysis Record

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04DUP

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04DUP

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL071 SDG#: DE036-04DUP

Laboratory Sample Analysis Record

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL139 SDG#: DE036-05

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL139 SDG#: DE036-05

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

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

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

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL139 SDG#: DE036-05

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL139 SDG#: DE036-05

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL139 SDG#: DE036-05

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL139 SDG#: DE036-05

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL083 SDG#: DE036-06

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL083 SDG#: DE036-06

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

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

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

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL083 SDG#: DE036-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for various compounds represent the lowest reporting limits attainable.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	14 U	14	36	200
01363	Alpha BHC	319-84-6	7.4 U	7.4	36	200
01363	Beta BHC	319-85-7	13 U	13	36	200
01363	Gamma BHC - Lindane	58-89-9	12 U	12	36	200
01363	Chlordane	57-74-9	170 U	170	740	200
01363	p,p-DDD	72-54-8	14 U	14	74	200
01363	p,p-DDE	72-55-9	500 U	500	500	200
01363	p,p-DDT	50-29-3	230 U	230	230	200
01363	Delta BHC	319-86-8	7.8 U	7.8	36	200
01363	Dieldrin	60-57-1	99 U	99	99	200
01363	Endosulfan I	959-98-8	9.5 U	9.5	36	200
01363	Endosulfan II	33213-65-9	14 U	14	74	200
01363	Endosulfan Sulfate	1031-07-8	14 U	14	74	200
01363	Endrin	72-20-8	14 U	14	74	200
01363	Endrin Aldehyde	7421-93-4	25 U	25	74	200
01363	Endrin Ketone	53494-70-5	14 U	14	74	200
01363	Heptachlor	76-44-8	98 U	98	98	200
01363	Heptachlor Epoxide	1024-57-3	780 U	780	780	1000
01363	Methoxychlor	72-43-5	74 U	74	360	200
01363	Mirex	2385-85-5	14 U	14	74	200
01363	Toxaphene	8001-35-2	480 U	480	1,400	200

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

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

Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1,100 U	1,100	3,600	1000
10225	Aroclor 5442	12642-23-8	1,100 U	1,100	3,600	1000
10225	Aroclor 5460	11126-42-4	1,100 U	1,100	3,600	1000
10225	PCB-1016	12674-11-2	360 U	360	1,800	1000
10225	PCB-1221	11104-28-2	540 U	540	1,800	1000
10225	PCB-1232	11141-16-5	560 U	560	1,800	1000
10225	PCB-1242	53469-21-9	540 U	540	1,800	1000
10225	PCB-1248	12672-29-6	18,000	360	1,800	1000
10225	PCB-1254	11097-69-1	2,300	360	1,800	1000
10225	PCB-1260	11096-82-5	360 U	360	1,800	1000
10225	PCB-1262	37324-23-5	360 U	360	1,800	1000
10225	PCB-1268	11100-14-4	360 U	360	1,800	1000

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL083 SDG#: DE036-06

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL083 SDG#: DE036-06

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL083 SDG#: DE036-06

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL074 SDG#: DE036-07

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL074 SDG#: DE036-07

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

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	1.5 J	0.73	1.8	1
10138	Acenaphthylene	208-96-8	0.58 J	0.36	1.8	1
10138	Anthracene	120-12-7	3.6	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	22	0.73	1.8	1
10138	Benzo(a)pyrene	50-32-8	26	0.73	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	40	0.73	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	14	0.73	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	11	0.73	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5 U	6.5	20	1
10138	Di-n-butylphthalate	84-74-2	9.0 J	6.5	20	1
10138	Chrysene	218-01-9	40	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	3.7	0.73	1.8	1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	20	1
10138	Fluoranthene	206-44-0	36	0.73	1.8	1
10138	Fluorene	86-73-7	0.80 J	0.73	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	11	0.73	1.8	1
10138	1-Methylnaphthalene	90-12-0	1.2 J	0.73	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.8 J	0.73	1.8	1
10138	Naphthalene	91-20-3	1.7 J	0.73	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20	1
10138	Phenanthrene	85-01-8	18	0.73	1.8	1
10138	Pyrene	129-00-0	32	0.73	1.8	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.9	J	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8	1
10401	2,4-DB	94-82-6	7.7	U	7.7	7.7	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.9	1
10401	MCPA	94-74-6	230	J	83	270	1
10401	MCPP (Mecoprop)	93-65-2	82	U	82	270	1
10401	2,4,5-T	93-76-5	0.27		0.089	0.19	1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.19	1

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL074 SDG#: DE036-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.072 U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.74 J	0.33	0.90	5
01363	Gamma BHC - Lindane	58-89-9	0.037 U	0.037	0.18	1
01363	Chlordane	57-74-9	0.87 U	0.87	3.7	1
01363	p,p-DDD	72-54-8	0.072 U	0.072	0.37	1
01363	p,p-DDE	72-55-9	0.072 U	0.072	0.37	1
01363	p,p-DDT	50-29-3	0.41 U	0.41	0.41	1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.13 U	0.13	0.37	1
01363	Endosulfan I	959-98-8	0.064 U	0.064	0.18	1
01363	Endosulfan II	33213-65-9	0.072 U	0.072	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072 U	0.072	0.37	1
01363	Endrin	72-20-8	0.072 U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.15 U	0.15	0.37	1
01363	Endrin Ketone	53494-70-5	0.072 U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.065 U	0.065	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037 U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8	1
01363	Mirex	2385-85-5	0.072 U	0.072	0.37	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.2	1

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

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

Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	5.4 U	5.4	18	5
10225	Aroclor 5442	12642-23-8	5.4 U	5.4	18	5
10225	Aroclor 5460	11126-42-4	8.9 J	5.4	18	5
10225	PCB-1016	12674-11-2	1.8 U	1.8	9.3	5
10225	PCB-1221	11104-28-2	2.7 U	2.7	9.3	5
10225	PCB-1232	11141-16-5	2.8 U	2.8	9.3	5
10225	PCB-1242	53469-21-9	2.7 U	2.7	9.3	5
10225	PCB-1248	12672-29-6	4.5 J	1.8	9.3	5
10225	PCB-1254	11097-69-1	4.8 J	1.8	9.3	5
10225	PCB-1260	11096-82-5	9.9	1.8	9.3	5
10225	PCB-1262	37324-23-5	1.8 U	1.8	9.3	5
10225	PCB-1268	11100-14-4	1.8 U	1.8	9.3	5

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL074 SDG#: DE036-07

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL074 SDG#: DE036-07

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL074 SDG#: DE036-07

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL301 SDG#: DE036-08

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL301 SDG#: DE036-08

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL301 SDG#: DE036-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCP and 2,4-DB represent the lowest reporting limits attainable.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.36 U	0.36	0.91	5
01363	Alpha BHC	319-84-6	0.19 U	0.19	0.91	5
01363	Beta BHC	319-85-7	0.33 U	0.33	0.91	5
01363	Gamma BHC - Lindane	58-89-9	0.19 U	0.19	0.91	5
01363	Chlordane	57-74-9	4.4 U	4.4	19	5
01363	p,p-DDD	72-54-8	0.36 U	0.36	1.9	5
01363	p,p-DDE	72-55-9	3.9 U	3.9	3.9	5
01363	p,p-DDT	50-29-3	4.5 U	4.5	4.5	5
01363	Delta BHC	319-86-8	0.20 U	0.20	0.91	5
01363	Dieldrin	60-57-1	1.5 U	1.5	1.9	5
01363	Endosulfan I	959-98-8	0.24 U	0.24	0.91	5
01363	Endosulfan II	33213-65-9	0.36 U	0.36	1.9	5
01363	Endosulfan Sulfate	1031-07-8	0.36 U	0.36	1.9	5
01363	Endrin	72-20-8	0.36 U	0.36	1.9	5
01363	Endrin Aldehyde	7421-93-4	1.0 U	1.0	1.9	5
01363	Endrin Ketone	53494-70-5	0.36 U	0.36	1.9	5
01363	Heptachlor	76-44-8	0.55 U	0.55	0.91	5
01363	Heptachlor Epoxide	1024-57-3	6.5 U	6.5	6.5	5
01363	Methoxychlor	72-43-5	1.9 U	1.9	9.1	5
01363	Mirex	2385-85-5	0.36 U	0.36	1.9	5
01363	Toxaphene	8001-35-2	12 U	12	36	5

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.
Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	11 U	11	36	10
10225	Aroclor 5442	12642-23-8	11 U	11	36	10
10225	Aroclor 5460	11126-42-4	110	11	36	10
10225	PCB-1016	12674-11-2	3.6 U	3.6	19	10
10225	PCB-1221	11104-28-2	5.5 U	5.5	19	10
10225	PCB-1232	11141-16-5	5.7 U	5.7	19	10
10225	PCB-1242	53469-21-9	5.5 U	5.5	19	10
10225	PCB-1248	12672-29-6	83	3.6	19	10
10225	PCB-1254	11097-69-1	100	3.6	19	10
10225	PCB-1260	11096-82-5	3.6 U	3.6	19	10
10225	PCB-1262	37324-23-5	3.6 U	3.6	19	10
10225	PCB-1268	11100-14-4	3.6 U	3.6	19	10

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL301 SDG#: DE036-08

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL301 SDG#: DE036-08

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL301 SDG#: DE036-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01645	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:23	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:00	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/28/2010 16:11	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:32	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 17:41	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 20:54	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 21:06	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL073 SDG#: DE036-09

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL073 SDG#: DE036-09

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL073 SDG#: DE036-09

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL073 SDG#: DE036-09

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL073 SDG#: DE036-09

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL073 SDG#: DE036-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01045	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:26	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:04	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:33	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 17:56	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 21:18	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 21:22	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL072 SDG#: DE036-10

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL072 SDG#: DE036-10

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

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

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

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL072 SDG#: DE036-10

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL072 SDG#: DE036-10

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL072 SDG#: DE036-10

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL072 SDG#: DE036-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01045	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:30	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:07	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:59	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:59	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:59	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:35	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 18:10	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 21:42	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 21:46	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

DUP04 SDG#: DE036-11FD

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

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

DUP04 SDG#: DE036-11FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	2-Nitrophenol	88-75-5	18 U	18	180	1
04688	4-Nitrophenol	100-02-7	180 U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18 U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18 U	18	180	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180 U	180	530	1
04688	Phenanthrene	85-01-8	23 J	18	180	1
04688	Phenol	108-95-2	18 U	18	180	1
04688	Pyrene	129-00-0	70 J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.75 J	0.35	1.8	1
10138	Anthracene	120-12-7	1.6 J	0.35	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.7 J	6.4	19	1
10138	Dibenz(a,h)anthracene	53-70-3	2.6	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.74 J	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.87 J	0.71	1.8	1
10138	Naphthalene	91-20-3	1.1 J	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	0.66	U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	520	U	520	520	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

DUP04 SDG#: DE036-11FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPP represent the lowest reporting limits attainable.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.36 U	0.36	0.36	1
01363	p,p-DDT	50-29-3	0.49 U	0.49	0.49	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.15 U	0.15	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.13 U	0.13	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	2.0 U	2.0	2.0	5
01363	Heptachlor Epoxide	1024-57-3	1.2 U	1.2	1.2	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1

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

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

Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	2.6 J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	2.1	0.35	1.8	1
10225	PCB-1260	11096-82-5	3.9	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

DUP04 SDG#: DE036-11FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,200	5.35	21.3	1
07914	Boron	7440-42-8	5.32	0.946	5.31	1
01650	Calcium	7440-70-2	3,040	6.51	21.3	1
01654	Iron	7439-89-6	20,900	5.01	21.3	1
01656	Lithium	7439-93-2	23.4	0.23	2.1	1
01657	Magnesium	7439-95-4	4,460	2.70	10.6	1
06958	Manganese	7439-96-5	248	0.0829	0.531	1
10145	Phosphorus	7723-14-0	394	0.595	10.6	1
01662	Potassium	7440-09-7	2,580	19.1	53.1	1
01667	Sodium	7440-23-5	102 J	39.6	106	1
07968	Strontium	7440-24-6	17.2	0.0659	0.531	1
06969	Tin	7440-31-5	2.42 J	1.06	10.6	1
06970	Titanium	7440-32-6	1,150	0.385	1.01	1
10146	Zirconium	7440-67-7	1.10 J	0.893	5.31	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.136 J	0.0625	0.208	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.83	0.0625	0.417	2
06126	Barium	7440-39-3	135	0.113	0.417	2
06127	Beryllium	7440-41-7	0.771	0.0167	0.104	2
06128	Cadmium	7440-43-9	0.382	0.0375	0.104	2
06131	Chromium	7440-47-3	28.8	0.125	0.417	2
06132	Cobalt	7440-48-4	9.00	0.0208	0.104	2
06133	Copper	7440-50-8	15.1	0.0688	0.417	2
06135	Lead	7439-92-1	11.3	0.0108	0.208	2
06138	Molybdenum	7439-98-7	0.750	0.0521	0.104	2
06139	Nickel	7440-02-0	17.1	0.104	0.417	2
06141	Selenium	7782-49-2	0.152 J	0.0417	0.417	2
06142	Silver	7440-22-4	1.22	0.0125	0.104	2
06145	Thallium	7440-28-0	0.324	0.0313	0.104	2
06148	Vanadium	7440-62-2	50.3	0.0229	0.104	2
06149	Zinc	7440-66-6	128	0.583	3.13	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.227	0.0030	0.106	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.3	0.85	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	31.9	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.76 J	0.21	1.1	1

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

DUP04 SDG#: DE036-11FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	454	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.34	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 01:39	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 18:29	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 10:19	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 04:54	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	01/07/2011 21:29	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 20:55	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1

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

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

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

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

DUP04 SDG#: DE036-11FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:34	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:11	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:02	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:02	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:02	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:36	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 19:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/29/2010 23:18	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 22:02	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD029 SDG#: DE036-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550	1
04688	Benidine	92-87-5	1,300	U 1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U 180	550	1
04688	Benzyl alcohol	100-51-6	180	U 180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Butylbenzylphthalate	85-68-7	31	J 18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180	1
04688	4-Chloroaniline	106-47-8	74	U 74	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	Diethylphthalate	84-66-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180	1
04688	Dimethylphthalate	131-11-3	18	U 18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550	1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	110	J 18	370	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	74	U 74	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	37	U 37	180	1
04688	4-Methylphenol	106-44-5	37	U 37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	37	U 37	180	1
04688	4-Nitroaniline	100-01-6	74	U 74	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD029 SDG#: DE036-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	550	1
04688	Phenol	108-95-2	18	U 18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180	1

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	7.4	U 7.4	18	10
10138	Acenaphthylene	208-96-8	3.7	U 3.7	18	10
10138	Anthracene	120-12-7	4.4	J 3.7	18	10
10138	Benzo(a)anthracene	56-55-3	9.6	J 7.4	18	10
10138	Benzo(a)pyrene	50-32-8	9.6	J 7.4	18	10
10138	Benzo(b)fluoranthene	205-99-2	27	7.4	18	10
10138	Benzo(g,h,i)perylene	191-24-2	7.4	U 7.4	18	10
10138	Benzo(k)fluoranthene	207-08-9	7.4	U 7.4	18	10
10138	Chrysene	218-01-9	25	3.7	18	10
10138	Dibenz(a,h)anthracene	53-70-3	7.4	U 7.4	18	10
10138	Fluoranthene	206-44-0	47	7.4	18	10
10138	Fluorene	86-73-7	7.4	U 7.4	18	10
10138	Indeno(1,2,3-cd)pyrene	193-39-5	7.4	U 7.4	18	10
10138	1-Methylnaphthalene	90-12-0	7.4	U 7.4	18	10
10138	2-Methylnaphthalene	91-57-6	7.4	U 7.4	18	10
10138	Naphthalene	91-20-3	7.4	U 7.4	18	10
10138	N-Nitrosodimethylamine	62-75-9	7.4	U 7.4	18	10
10138	Di-n-octylphthalate	117-84-0	97	J 66	200	10
10138	Phenanthrene	85-01-8	22	7.4	18	10
10138	Pyrene	129-00-0	32	7.4	18	10

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

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	2.0	U 2.0	4.0
10401	Dalapon	75-99-0	4.9	U 4.9	10
10401	2,4-DB	94-82-6	0.69	U 0.69	1.9
10401	Dicamba	1918-00-9	0.44	U 0.44	1.3
10401	Dinoseb	88-85-7	0.89	U 0.89	2.7
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U 0.89	1.9
10401	MCPA	94-74-6	340	U 340	340
10401	MCPP (Mecoprop)	93-65-2	83	U 83	280
10401	2,4,5-T	93-76-5	0.33	0.091	0.19
10401	2,4,5-TP	93-72-1	0.083	U 0.083	0.19

The recovery for Dinoseb is outside the QC limits. However, this compound does

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LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD029 SDG#: DE036-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPA and 2,4-D represent the lowest reporting limits attainable.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.37 U	0.37	0.92	5
01363	Alpha BHC	319-84-6	0.29 J	0.19	0.92	5
01363	Beta BHC	319-85-7	0.33 U	0.33	0.92	5
01363	Gamma BHC - Lindane	58-89-9	0.19 U	0.19	0.92	5
01363	Chlordane	57-74-9	4.4 U	4.4	19	5
01363	p,p-DDD	72-54-8	0.74 U	0.74	1.9	5
01363	p,p-DDE	72-55-9	0.43 U	0.43	1.9	5
01363	p,p-DDT	50-29-3	8.5 U	8.5	8.5	5
01363	Delta BHC	319-86-8	0.20 U	0.20	0.92	5
01363	Dieldrin	60-57-1	1.3 U	1.3	1.9	5
01363	Endosulfan I	959-98-8	0.24 U	0.24	0.92	5
01363	Endosulfan II	33213-65-9	0.48 U	0.48	1.9	5
01363	Endosulfan Sulfate	1031-07-8	0.37 U	0.37	1.9	5
01363	Endrin	72-20-8	0.37 U	0.37	1.9	5
01363	Endrin Aldehyde	7421-93-4	0.92 U	0.92	1.9	5
01363	Endrin Ketone	53494-70-5	0.37 U	0.37	1.9	5
01363	Heptachlor	76-44-8	0.33 U	0.33	0.92	5
01363	Heptachlor Epoxide	1024-57-3	1.2 U	1.2	1.2	5
01363	Methoxychlor	72-43-5	1.9 U	1.9	9.2	5
01363	Mirex	2385-85-5	0.37 U	0.37	1.9	5
01363	Toxaphene	8001-35-2	12 U	12	37	5

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.
Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	11 U	11	37	10
10225	Aroclor 5442	12642-23-8	11 U	11	37	10
10225	Aroclor 5460	11126-42-4	170	11	37	10
10225	PCB-1016	12674-11-2	3.7 U	3.7	19	10
10225	PCB-1221	11104-28-2	5.5 U	5.5	19	10
10225	PCB-1232	11141-16-5	5.8 U	5.8	19	10
10225	PCB-1242	53469-21-9	5.5 U	5.5	19	10
10225	PCB-1248	12672-29-6	3.7 U	3.7	19	10
10225	PCB-1254	11097-69-1	180	3.7	19	10
10225	PCB-1260	11096-82-5	3.7 U	3.7	19	10
10225	PCB-1262	37324-23-5	3.7 U	3.7	19	10
10225	PCB-1268	11100-14-4	3.7 U	3.7	19	10

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
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SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

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14420 Albemarle Point Place
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Submitted: 12/14/2010 10:05

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SD029 SDG#: DE036-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,400	5.36	21.3	1
07914	Boron	7440-42-8	4.76 J	0.948	5.32	1
01650	Calcium	7440-70-2	23,900	6.53	21.3	1
01654	Iron	7439-89-6	16,900	5.02	21.3	1
01656	Lithium	7439-93-2	18.5	0.23	2.1	1
01657	Magnesium	7439-95-4	4,470	2.70	10.6	1
06958	Manganese	7439-96-5	255	0.0831	0.532	1
10145	Phosphorus	7723-14-0	403	0.596	10.6	1
01662	Potassium	7440-09-7	2,610	19.2	53.2	1
01667	Sodium	7440-23-5	86.8 J	39.7	106	1
07968	Strontium	7440-24-6	45.6	0.0660	0.532	1
06969	Tin	7440-31-5	2.05 J	1.06	10.6	1
06970	Titanium	7440-32-6	1,020	0.409	1.08	1
10146	Zirconium	7440-67-7	0.894 U	0.894	5.32	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.191 J	0.0651	0.217	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.15	0.0651	0.434	2
06126	Barium	7440-39-3	100	0.117	0.434	2
06127	Beryllium	7440-41-7	0.463	0.0174	0.109	2
06128	Cadmium	7440-43-9	0.902	0.0391	0.109	2
06131	Chromium	7440-47-3	23.0	0.130	0.434	2
06132	Cobalt	7440-48-4	6.94	0.0217	0.109	2
06133	Copper	7440-50-8	17.8	0.0717	0.434	2
06135	Lead	7439-92-1	50.6	0.0113	0.217	2
06138	Molybdenum	7439-98-7	0.694	0.0543	0.109	2
06139	Nickel	7440-02-0	15.1	0.109	0.434	2
06141	Selenium	7782-49-2	0.144 J	0.0434	0.434	2
06142	Silver	7440-22-4	0.147	0.0130	0.109	2
06145	Thallium	7440-28-0	0.188	0.0326	0.109	2
06148	Vanadium	7440-62-2	41.3	0.0239	0.109	2
06149	Zinc	7440-66-6	174	0.608	3.26	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0380 J	0.0031	0.110	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.89 U	0.89	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.2	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1	1

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

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Submitted: 12/14/2010 10:05

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SD029 SDG#: DE036-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	461	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.35	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	9.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 02:14	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 19:02	Joseph M Gambler	10
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 10:47	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 05:08	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 21:13	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
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SD029 SDG#: DE036-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:38	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:15	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:05	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:05	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:05	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/28/2010 16:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:37	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 18:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 00:06	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 22:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD031 SDG#: DE036-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700	1
04688	Benzoic acid	65-85-0	190	U 190	560	1
04688	Benzyl alcohol	100-51-6	190	U 190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190	1
04688	4-Chloroaniline	106-47-8	74	U 74	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560	1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	38	J 19	370	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	74	U 74	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	37	U 37	190	1
04688	4-Methylphenol	106-44-5	37	U 37	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	37	U 37	190	1
04688	4-Nitroaniline	100-01-6	74	U 74	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	560	1

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD031 SDG#: DE036-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19 U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19 U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37 U	37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37 U	37	190	1

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74 U	0.74	1.9	1
10138	Acenaphthylene	208-96-8	0.37 U	0.37	1.9	1
10138	Anthracene	120-12-7	0.43 J	0.37	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.99 J	0.74	1.9	1
10138	Benzo(a)pyrene	50-32-8	1.1 J	0.74	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	2.7	0.74	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.74 U	0.74	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.85 J	0.74	1.9	1
10138	Butylbenzylphthalate	85-68-7	7.2 J	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	13 J	6.7	20	1
10138	Chrysene	218-01-9	2.2	0.37	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.74 U	0.74	1.9	1
10138	Diethylphthalate	84-66-2	6.7 U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7 U	6.7	20	1
10138	Fluoranthene	206-44-0	3.0	0.74	1.9	1
10138	Fluorene	86-73-7	2.0	0.74	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74 U	0.74	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.74 U	0.74	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.74 U	0.74	1.9	1
10138	Naphthalene	91-20-3	1.1 J	0.74	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.74 U	0.74	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.7 U	6.7	20	1
10138	Phenanthrene	85-01-8	1.6 J	0.74	1.9	1
10138	Pyrene	129-00-0	2.3	0.74	1.9	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	10	1
10401	2,4-DB	94-82-6	16	U	16	16	1
10401	Dicamba	1918-00-9	0.69	J	0.44	1.3	1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9	1
10401	MCPA	94-74-6	84	U	84	280	1
10401	MCPP (Mecoprop)	93-65-2	83	U	83	280	1
10401	2,4,5-T	93-76-5	0.091	U	0.091	0.19	1
10401	2,4,5-TP	93-72-1	0.083	U	0.083	0.19	1

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD031 SDG#: DE036-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.073 U	0.073	0.18	1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.18	1
01363	Beta BHC	319-85-7	0.13 U	0.13	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.051 U	0.051	0.18	1
01363	Chlordane	57-74-9	2.4 U	2.4	3.8	1
01363	p,p-DDD	72-54-8	0.073 U	0.073	0.38	1
01363	p,p-DDE	72-55-9	1.1 U	1.1	1.1	1
01363	p,p-DDT	50-29-3	2.3 U	2.3	2.3	1
01363	Delta BHC	319-86-8	0.10 U	0.10	0.18	1
01363	Dieldrin	60-57-1	0.28 U	0.28	0.38	1
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.19 U	0.19	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.073 U	0.073	0.38	1
01363	Endrin	72-20-8	0.073 U	0.073	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.073 U	0.073	0.38	1
01363	Endrin Ketone	53494-70-5	0.17 U	0.17	0.38	1
01363	Heptachlor	76-44-8	0.067 U	0.067	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.11 U	0.11	0.18	1
01363	Methoxychlor	72-43-5	0.93 U	0.93	1.8	1
01363	Mirex	2385-85-5	0.24 U	0.24	0.38	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.3	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	5.6 U	5.6	18	5
10225	Aroclor 5442	12642-23-8	5.6 U	5.6	18	5
10225	Aroclor 5460	11126-42-4	9.3 J	5.6	18	5
10225	PCB-1016	12674-11-2	1.8 U	1.8	9.4	5
10225	PCB-1221	11104-28-2	2.8 U	2.8	9.4	5
10225	PCB-1232	11141-16-5	2.9 U	2.9	9.4	5
10225	PCB-1242	53469-21-9	2.8 U	2.8	9.4	5
10225	PCB-1248	12672-29-6	1.8 U	1.8	9.4	5
10225	PCB-1254	11097-69-1	8.4 J	1.8	9.4	5
10225	PCB-1260	11096-82-5	5.3 J	1.8	9.4	5
10225	PCB-1262	37324-23-5	1.8 U	1.8	9.4	5
10225	PCB-1268	11100-14-4	1.8 U	1.8	9.4	5
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	10,300	5.37	21.4	1
07914	Boron	7440-42-8	6.11	0.951	5.34	1

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD031 SDG#: DE036-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	3,000	6.55	21.4	1
01654	Iron	7439-89-6	17,000	5.03	21.4	1
01656	Lithium	7439-93-2	19.5	0.24	2.1	1
01657	Magnesium	7439-95-4	3,910	2.71	10.7	1
06958	Manganese	7439-96-5	234	0.0833	0.534	1
10145	Phosphorus	7723-14-0	374	0.598	10.7	1
01662	Potassium	7440-09-7	2,850	19.2	53.4	1
01667	Sodium	7440-23-5	54.3 J	39.9	107	1
07968	Strontium	7440-24-6	16.1	0.0662	0.534	1
06969	Tin	7440-31-5	2.03 J	1.07	10.7	1
06970	Titanium	7440-32-6	1,200	0.406	1.07	1
10146	Zirconium	7440-67-7	0.920 J	0.897	5.34	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0660 U	0.0660	0.220	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.90	0.0660	0.440	2
06126	Barium	7440-39-3	112	0.119	0.440	2
06127	Beryllium	7440-41-7	0.546	0.0176	0.110	2
06128	Cadmium	7440-43-9	0.255	0.0396	0.110	2
06131	Chromium	7440-47-3	25.1	0.132	0.440	2
06132	Cobalt	7440-48-4	7.18	0.0220	0.110	2
06133	Copper	7440-50-8	12.7	0.0726	0.440	2
06135	Lead	7439-92-1	20.2	0.0114	0.220	2
06138	Molybdenum	7439-98-7	0.584	0.0550	0.110	2
06139	Nickel	7440-02-0	15.1	0.110	0.440	2
06141	Selenium	7782-49-2	0.151 J	0.0440	0.440	2
06142	Silver	7440-22-4	0.0557 J	0.0132	0.110	2
06145	Thallium	7440-28-0	0.302	0.0330	0.110	2
06148	Vanadium	7440-62-2	44.2	0.0242	0.110	2
06149	Zinc	7440-66-6	89.1	0.616	3.30	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0049 J	0.0030	0.105	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4	0.89	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.3	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1	1
	ASTM D1498		mV	mV	mV	

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD031 SDG#: DE036-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	480	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
			SW-846 9045C modified	Std. Units	Std. Units	Std. Units
00394	22a pH by 9045C	n.a.	6.92	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	10	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 02:48	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 19:35	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 11:15	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 05:23	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 21:32	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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14420 Albemarle Point Place
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Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD031 SDG#: DE036-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:49	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:19	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:08	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:08	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:08	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:39	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 19:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 00:30	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 22:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD030 SDG#: DE036-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	600	1
04688	Benzidine	92-87-5	1,400	U 1,400	4,000	1
04688	Benzoic acid	65-85-0	200	U 200	600	1
04688	Benzyl alcohol	100-51-6	200	U 200	600	1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200	1
04688	Carbazole	86-74-8	20	U 20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	40	U 40	200	1
04688	4-Chloroaniline	106-47-8	80	U 80	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200	1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200	1
04688	2-Chlorophenol	95-57-8	20	U 20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U 40	200	1
04688	Dibenzofuran	132-64-9	20	U 20	200	1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200	1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200	1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	400	1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200	1
04688	2,4-Dimethylphenol	105-67-9	40	U 40	200	1
04688	3,5-Dimethylphenol	108-68-9	40	U 40	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	600	1
04688	2,4-Dinitrophenol	51-28-5	800	U 800	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	40	U 40	200	1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	56	J 20	400	1
04688	Hexachlorobenzene	118-74-1	20	U 20	200	1
04688	Hexachlorobutadiene	87-68-3	80	U 80	200	1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	600	1
04688	Hexachloroethane	67-72-1	20	U 20	200	1
04688	Isophorone	78-59-1	20	U 20	200	1
04688	2-Methylphenol	95-48-7	40	U 40	200	1
04688	4-Methylphenol	106-44-5	40	U 40	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	20	U 20	200	1
04688	3-Nitroaniline	99-09-2	40	U 40	200	1
04688	4-Nitroaniline	100-01-6	80	U 80	200	1
04688	Nitrobenzene	98-95-3	20	U 20	200	1
04688	2-Nitrophenol	88-75-5	20	U 20	200	1
04688	4-Nitrophenol	100-02-7	200	U 200	600	1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	200	U 200	600	1

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD030 SDG#: DE036-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	20 U	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	20 U	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	40 U	40	200	1
04688	2,4,6-Trichlorophenol	88-06-2	40 U	40	200	1

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.80 U	0.80	2.0	1
10138	Acenaphthylene	208-96-8	0.40 U	0.40	2.0	1
10138	Anthracene	120-12-7	0.40 U	0.40	2.0	1
10138	Benzo(a)anthracene	56-55-3	0.80 U	0.80	2.0	1
10138	Benzo(a)pyrene	50-32-8	0.80 U	0.80	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	2.0	0.80	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	0.80 U	0.80	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	0.80 U	0.80	2.0	1
10138	Butylbenzylphthalate	85-68-7	7.2 U	7.2	22	1
10138	Di-n-butylphthalate	84-74-2	7.3 J	7.2	22	1
10138	Chrysene	218-01-9	1.6 J	0.40	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	0.80 U	0.80	2.0	1
10138	Diethylphthalate	84-66-2	7.2 U	7.2	22	1
10138	Dimethylphthalate	131-11-3	7.2 U	7.2	22	1
10138	Fluoranthene	206-44-0	1.4 J	0.80	2.0	1
10138	Fluorene	86-73-7	0.80 U	0.80	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80 U	0.80	2.0	1
10138	1-Methylnaphthalene	90-12-0	0.80 U	0.80	2.0	1
10138	2-Methylnaphthalene	91-57-6	0.80 U	0.80	2.0	1
10138	Naphthalene	91-20-3	0.83 J	0.80	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	0.80 U	0.80	2.0	1
10138	Di-n-octylphthalate	117-84-0	7.2 U	7.2	22	1
10138	Phenanthrene	85-01-8	0.89 J	0.80	2.0	1
10138	Pyrene	129-00-0	1.2 J	0.80	2.0	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	3.0	J	1.4	4.3	1
10401	Dalapon	75-99-0	5.3	U	5.3	11	1
10401	2,4-DB	94-82-6	12	U	12	12	1
10401	Dicamba	1918-00-9	0.78	J	0.48	1.4	1
10401	Dinoseb	88-85-7	0.96	U	0.96	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.96	U	0.96	2.0	1
10401	MCPA	94-74-6	500	U	500	500	1
10401	MCPP (Mecoprop)	93-65-2	90	U	90	300	1
10401	2,4,5-T	93-76-5	0.098	U	0.098	0.20	1
10401	2,4,5-TP	93-72-1	0.090	U	0.090	0.20	1

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD030 SDG#: DE036-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPA and 2,4-DB represent the lowest reporting limits attainable.						
Pesticides/PCBs						
	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.079 U	0.079	0.20	1
01363	Alpha BHC	319-84-6	0.050 U	0.050	0.20	1
01363	Beta BHC	319-85-7	0.54	0.072	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.062 U	0.062	0.20	1
01363	Chlordane	57-74-9	4.7 U	4.7	4.7	1
01363	p,p-DDD	72-54-8	1.9 U	1.9	1.9	1
01363	p,p-DDE	72-55-9	1.1 U	1.1	1.1	1
01363	p,p-DDT	50-29-3	2.6 U	2.6	2.6	1
01363	Delta BHC	319-86-8	0.043 U	0.043	0.20	1
01363	Dieldrin	60-57-1	0.44 U	0.44	0.44	1
01363	Endosulfan I	959-98-8	0.053 U	0.053	0.20	1
01363	Endosulfan II	33213-65-9	0.37 U	0.37	0.41	1
01363	Endosulfan Sulfate	1031-07-8	0.079 U	0.079	0.41	1
01363	Endrin	72-20-8	0.079 U	0.079	0.41	1
01363	Endrin Aldehyde	7421-93-4	0.61 U	0.61	0.61	1
01363	Endrin Ketone	53494-70-5	0.35 U	0.35	0.41	1
01363	Heptachlor	76-44-8	0.072 U	0.072	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.28 U	0.28	0.28	1
01363	Methoxychlor	72-43-5	0.41 U	0.41	2.0	1
01363	Mirex	2385-85-5	0.15 U	0.15	0.41	1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.9	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.4 U	2.4	7.9	2
10225	Aroclor 5442	12642-23-8	2.4 U	2.4	7.9	2
10225	Aroclor 5460	11126-42-4	6.7 J	2.4	7.9	2
10225	PCB-1016	12674-11-2	0.79 U	0.79	4.1	2
10225	PCB-1221	11104-28-2	1.2 U	1.2	4.1	2
10225	PCB-1232	11141-16-5	1.2 U	1.2	4.1	2
10225	PCB-1242	53469-21-9	1.2 U	1.2	4.1	2
10225	PCB-1248	12672-29-6	0.79 U	0.79	4.1	2
10225	PCB-1254	11097-69-1	6.3	0.79	4.1	2
10225	PCB-1260	11096-82-5	5.6	0.79	4.1	2
10225	PCB-1262	37324-23-5	0.79 U	0.79	4.1	2
10225	PCB-1268	11100-14-4	0.79 U	0.79	4.1	2
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,700	5.78	23.0	1
07914	Boron	7440-42-8	7.59	1.02	5.74	1

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD030 SDG#: DE036-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	4,700	7.04	23.0	1
01654	Iron	7439-89-6	26,600	5.41	23.0	1
01656	Lithium	7439-93-2	28.8	0.25	2.3	1
01657	Magnesium	7439-95-4	5,770	2.92	11.5	1
06958	Manganese	7439-96-5	399	0.0896	0.574	1
10145	Phosphorus	7723-14-0	700	0.643	11.5	1
01662	Potassium	7440-09-7	5,000	20.7	57.4	1
01667	Sodium	7440-23-5	78.9 J	42.8	115	1
07968	Strontium	7440-24-6	29.1	0.0712	0.574	1
06969	Tin	7440-31-5	2.34 J	1.15	11.5	1
06970	Titanium	7440-32-6	1,460	0.437	1.15	1
10146	Zirconium	7440-67-7	1.44 J	0.965	5.74	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.115 J	0.0717	0.239	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	7.83	0.0717	0.478	2
06126	Barium	7440-39-3	202	0.129	0.478	2
06127	Beryllium	7440-41-7	0.785	0.0191	0.119	2
06128	Cadmium	7440-43-9	0.461	0.0430	0.119	2
06131	Chromium	7440-47-3	33.4	0.143	0.478	2
06132	Cobalt	7440-48-4	9.86	0.0239	0.119	2
06133	Copper	7440-50-8	18.1	0.0789	0.478	2
06135	Lead	7439-92-1	19.8	0.0124	0.239	2
06138	Molybdenum	7439-98-7	0.876	0.0597	0.119	2
06139	Nickel	7440-02-0	22.2	0.119	0.478	2
06141	Selenium	7782-49-2	0.209 J	0.0478	0.478	2
06142	Silver	7440-22-4	0.0806 J	0.0143	0.119	2
06145	Thallium	7440-28-0	0.394	0.0358	0.119	2
06148	Vanadium	7440-62-2	56.4	0.0263	0.119	2
06149	Zinc	7440-66-6	122	0.669	3.58	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0222 J	0.0032	0.113	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.96 U	0.96	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8 U	10.8	35.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.70 J	0.24	1.2	1
	ASTM D1498		mV	mV	mV	

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD030 SDG#: DE036-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	489	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.22	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	16.3	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 03:23	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 20:09	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 11:42	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 05:37	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 21:51	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD030 SDG#: DE036-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01045	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:53	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:29	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:17	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:17	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:17	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:40	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 20:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 00:54	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 22:58	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD040 SDG#: DE036-15

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

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD040 SDG#: DE036-15

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

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73 U	0.73	1.8	1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8	1
10138	Anthracene	120-12-7	0.38 J	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.84 J	0.73	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.79 J	0.73	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	2.1	0.73	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.73 U	0.73	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.73 J	0.73	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5 U	6.5	20	1
10138	Di-n-butylphthalate	84-74-2	6.5 U	6.5	20	1
10138	Chrysene	218-01-9	1.8 J	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.73 U	0.73	1.8	1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	20	1
10138	Fluoranthene	206-44-0	3.2	0.73	1.8	1
10138	Fluorene	86-73-7	0.73 U	0.73	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73 U	0.73	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8	1
10138	Naphthalene	91-20-3	1.3 J	0.73	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20	1
10138	Phenanthrene	85-01-8	2.4	0.73	1.8	1
10138	Pyrene	129-00-0	2.3	0.73	1.8	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8	1
10401	2,4-DB	94-82-6	0.68	U	0.68	1.9	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.9	1
10401	MCPA	94-74-6	580	U	580	580	1
10401	MCPP (Mecoprop)	93-65-2	410		82	270	1
10401	2,4,5-T	93-76-5	0.089	U	0.089	0.19	1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.19	1

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD040 SDG#: DE036-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPA						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.072 U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.075 U	0.075	0.18	1
01363	Beta BHC	319-85-7	0.065 U	0.065	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.30 U	0.30	0.30	1
01363	Chlordane	57-74-9	4.1 U	4.1	4.1	1
01363	p,p-DDD	72-54-8	0.072 U	0.072	0.37	1
01363	p,p-DDE	72-55-9	0.56 U	0.56	0.56	1
01363	p,p-DDT	50-29-3	0.69 U	0.69	0.69	1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.18 U	0.18	0.37	1
01363	Endosulfan I	959-98-8	0.048 U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.13 U	0.13	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072 U	0.072	0.37	1
01363	Endrin	72-20-8	0.072 U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.25 U	0.25	0.37	1
01363	Endrin Ketone	53494-70-5	0.13 U	0.13	0.37	1
01363	Heptachlor	76-44-8	0.17 U	0.17	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.050 U	0.050	0.18	1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8	1
01363	Mirex	2385-85-5	0.072 U	0.072	0.37	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.2	1

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

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

Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	4.2	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.55 U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.55 U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9	1
10225	PCB-1254	11097-69-1	2.4	0.36	1.9	1
10225	PCB-1260	11096-82-5	4.3	0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD040 SDG#: DE036-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,700	5.38	21.4	1
07914	Boron	7440-42-8	5.27 J	0.952	5.35	1
01650	Calcium	7440-70-2	2,320	6.55	21.4	1
01654	Iron	7439-89-6	18,700	5.04	21.4	1
01656	Lithium	7439-93-2	21.6	0.24	2.1	1
01657	Magnesium	7439-95-4	4,180	2.72	10.7	1
06958	Manganese	7439-96-5	252	0.0834	0.535	1
10145	Phosphorus	7723-14-0	408	0.599	10.7	1
01662	Potassium	7440-09-7	3,390	19.2	53.5	1
01667	Sodium	7440-23-5	62.3 J	39.9	107	1
07968	Strontium	7440-24-6	13.8	0.0663	0.535	1
06969	Tin	7440-31-5	1.82 J	1.07	10.7	1
06970	Titanium	7440-32-6	1,120	0.410	1.08	1
10146	Zirconium	7440-67-7	1.05 J	0.898	5.35	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0654 U	0.0654	0.218	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.31	0.0654	0.436	2
06126	Barium	7440-39-3	120	0.118	0.436	2
06127	Beryllium	7440-41-7	0.503	0.0174	0.109	2
06128	Cadmium	7440-43-9	0.192	0.0393	0.109	2
06131	Chromium	7440-47-3	20.5	0.131	0.436	2
06132	Cobalt	7440-48-4	6.78	0.0218	0.109	2
06133	Copper	7440-50-8	9.21	0.0720	0.436	2
06135	Lead	7439-92-1	10.8	0.0113	0.218	2
06138	Molybdenum	7439-98-7	0.471	0.0545	0.109	2
06139	Nickel	7440-02-0	13.0	0.109	0.436	2
06141	Selenium	7782-49-2	0.129 J	0.0436	0.436	2
06142	Silver	7440-22-4	0.0217 J	0.0131	0.109	2
06145	Thallium	7440-28-0	0.310	0.0327	0.109	2
06148	Vanadium	7440-62-2	41.7	0.0240	0.109	2
06149	Zinc	7440-66-6	77.6	0.611	3.27	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0039 J	0.0031	0.107	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.87 U	0.87	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.7	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.44 J	0.22	1.1	1

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD040 SDG#: DE036-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	494	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.01	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	8.3	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 03:57	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 20:42	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 12:10	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 05:52	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 23:23	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SD040 SDG#: DE036-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:57	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:33	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/28/2010 16:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:44	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 21:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 01:19	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 23:22	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL086 SDG#: DE036-16

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

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL086 SDG#: DE036-16

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

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71 U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71 U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71 U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71 U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71 U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4 U	6.4	19	1
10138	Chrysene	218-01-9	0.45 J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71 U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Fluoranthene	206-44-0	0.71 U	0.71	1.8	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71 U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.89 J	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19	1
10138	Phenanthrene	85-01-8	0.71 U	0.71	1.8	1
10138	Pyrene	129-00-0	0.71 U	0.71	1.8	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	0.66	U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	140	U	140	270	1
10401	2,4,5-T	93-76-5	1.8		0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.14	U	0.14	0.18	1

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL086 SDG#: DE036-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCP and 2,4,5-TP represent the lowest reporting limits attainable.						
Pesticides/PCBs						
	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.070 U	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.070 U	0.070	0.36	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.17 U	0.17	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.7 J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	5.2	0.35	1.8	1
10225	PCB-1254	11097-69-1	3.6	0.35	1.8	1
10225	PCB-1260	11096-82-5	1.7 J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,900	5.18	20.6	1
07914	Boron	7440-42-8	6.40	0.917	5.15	1

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL086 SDG#: DE036-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	3,430	6.32	20.6	1
01654	Iron	7439-89-6	18,500	4.85	20.6	1
01656	Lithium	7439-93-2	19.5	0.23	2.1	1
01657	Magnesium	7439-95-4	3,520	2.62	10.3	1
06958	Manganese	7439-96-5	255	0.0804	0.515	1
10145	Phosphorus	7723-14-0	358	0.577	10.3	1
01662	Potassium	7440-09-7	3,280	18.6	51.5	1
01667	Sodium	7440-23-5	71.0 J	38.4	103	1
07968	Strontium	7440-24-6	20.6	0.0639	0.515	1
06969	Tin	7440-31-5	1.98 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,110	0.403	1.06	1
10146	Zirconium	7440-67-7	1.95 J	0.866	5.15	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0631 U	0.0631	0.210	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.85	0.0631	0.420	2
06126	Barium	7440-39-3	122	0.114	0.420	2
06127	Beryllium	7440-41-7	0.729	0.0168	0.105	2
06128	Cadmium	7440-43-9	0.287	0.0378	0.105	2
06131	Chromium	7440-47-3	22.9	0.126	0.420	2
06132	Cobalt	7440-48-4	7.16	0.0210	0.105	2
06133	Copper	7440-50-8	10.5	0.0694	0.420	2
06135	Lead	7439-92-1	9.17	0.0109	0.210	2
06138	Molybdenum	7439-98-7	0.902	0.0526	0.105	2
06139	Nickel	7440-02-0	13.9	0.105	0.420	2
06141	Selenium	7782-49-2	0.140 J	0.0420	0.420	2
06142	Silver	7440-22-4	0.0435 J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.375	0.0315	0.105	2
06148	Vanadium	7440-62-2	40.9	0.0231	0.105	2
06149	Zinc	7440-66-6	81.6	0.589	3.15	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0098 J	0.0029	0.101	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2	0.85	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.8 J	9.6	31.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.47 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL086 SDG#: DE036-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	468	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.51	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 04:31	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/24/2010 03:03	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 12:38	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 07:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 23:42	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL086 SDG#: DE036-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 10:00	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:37	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:23	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:23	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:23	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:45	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 21:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 01:43	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 23:38	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL092 SDG#: DE036-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U 190	560	1
04688	Benzyl alcohol	100-51-6	190	U 190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190	1
04688	4-Chloroaniline	106-47-8	75	U 75	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560	1
04688	2,4-Dinitrophenol	51-28-5	750	U 750	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	380	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	38	U 38	190	1
04688	4-Methylphenol	106-44-5	38	U 38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	38	U 38	190	1
04688	4-Nitroaniline	100-01-6	75	U 75	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	560	1

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL092 SDG#: DE036-17

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

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75 U	0.75	1.9	1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38 U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.75 U	0.75	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.75 U	0.75	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.75 U	0.75	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.75 U	0.75	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.75 U	0.75	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8 U	6.8	20	1
10138	Di-n-butylphthalate	84-74-2	6.8 U	6.8	20	1
10138	Chrysene	218-01-9	0.38 U	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.75 U	0.75	1.9	1
10138	Diethylphthalate	84-66-2	6.8 U	6.8	20	1
10138	Dimethylphthalate	131-11-3	6.8 U	6.8	20	1
10138	Fluoranthene	206-44-0	0.75 U	0.75	1.9	1
10138	Fluorene	86-73-7	0.75 U	0.75	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75 U	0.75	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.75 U	0.75	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.75 U	0.75	1.9	1
10138	Naphthalene	91-20-3	0.78 J	0.75	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.75 U	0.75	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.8 U	6.8	20	1
10138	Phenanthrene	85-01-8	0.75 U	0.75	1.9	1
10138	Pyrene	129-00-0	0.75 U	0.75	1.9	1

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.1
10401	Dalapon	75-99-0	5.0 U	5.0	10
10401	2,4-DB	94-82-6	3.1	0.70	1.9
10401	Dicamba	1918-00-9	0.45 U	0.45	1.4
10401	Dinoseb	88-85-7	0.90 U	0.90	2.7
10401	2,4-DP (Dichlorprop)	120-36-5	0.90 U	0.90	1.9
10401	MCPA	94-74-6	450	86	280
10401	MCPP (Mecoprop)	93-65-2	84 U	84	280
10401	2,4,5-T	93-76-5	0.092 U	0.092	0.19
10401	2,4,5-TP	93-72-1	0.084 U	0.084	0.19

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL092 SDG#: DE036-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.074 U	0.074	0.19	1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.19	1
01363	Beta BHC	319-85-7	0.068 U	0.068	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.19	1
01363	Chlordane	57-74-9	0.90 U	0.90	3.8	1
01363	p,p-DDD	72-54-8	0.074 U	0.074	0.38	1
01363	p,p-DDE	72-55-9	0.074 U	0.074	0.38	1
01363	p,p-DDT	50-29-3	0.074 U	0.074	0.38	1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19	1
01363	Dieldrin	60-57-1	0.074 U	0.074	0.38	1
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.19	1
01363	Endosulfan II	33213-65-9	0.074 U	0.074	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.074 U	0.074	0.38	1
01363	Endrin	72-20-8	0.074 U	0.074	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.074 U	0.074	0.38	1
01363	Endrin Ketone	53494-70-5	0.074 U	0.074	0.38	1
01363	Heptachlor	76-44-8	0.068 U	0.068	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.038 U	0.038	0.19	1
01363	Methoxychlor	72-43-5	0.38 U	0.38	1.9	1
01363	Mirex	2385-85-5	0.074 U	0.074	0.38	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.4	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.59 U	0.59	1.9	1
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9	1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9	1
10225	PCB-1260	11096-82-5	0.37 U	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	26,400	5.61	22.3	1
07914	Boron	7440-42-8	9.54	0.992	5.57	1
01650	Calcium	7440-70-2	19,800	6.83	22.3	1
01654	Iron	7439-89-6	33,300	10.5	44.6	2
01656	Lithium	7439-93-2	37.3	0.25	2.2	1
01657	Magnesium	7439-95-4	8,570	2.83	11.1	1
06958	Manganese	7439-96-5	360	0.0870	0.557	1

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL092 SDG#: DE036-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
10145	Phosphorus	7723-14-0	569	0.624	11.1	1
01662	Potassium	7440-09-7	6,160	20.1	55.7	1
01667	Sodium	7440-23-5	113	41.6	111	1
07968	Strontium	7440-24-6	51.1	0.0691	0.557	1
06969	Tin	7440-31-5	2.05 J	1.11	11.1	1
06970	Titanium	7440-32-6	1,610	0.424	1.11	1
10146	Zirconium	7440-67-7	3.79 J	0.937	5.57	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0680 J	0.0669	0.223	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	8.56	0.0669	0.446	2
06126	Barium	7440-39-3	147	0.120	0.446	2
06127	Beryllium	7440-41-7	0.867	0.0178	0.111	2
06128	Cadmium	7440-43-9	0.285	0.0401	0.111	2
06131	Chromium	7440-47-3	43.1	0.134	0.446	2
06132	Cobalt	7440-48-4	12.3	0.0223	0.111	2
06133	Copper	7440-50-8	19.4	0.0736	0.446	2
06135	Lead	7439-92-1	12.7	0.0116	0.223	2
06138	Molybdenum	7439-98-7	0.606	0.0557	0.111	2
06139	Nickel	7440-02-0	23.3	0.111	0.446	2
06141	Selenium	7782-49-2	0.320 J	0.0446	0.446	2
06142	Silver	7440-22-4	0.0392 J	0.0134	0.111	2
06145	Thallium	7440-28-0	0.468	0.0334	0.111	2
06148	Vanadium	7440-62-2	84.7	0.0245	0.111	2
06149	Zinc	7440-66-6	111	0.624	3.34	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.113	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.6	0.90	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.39 J	0.23	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	459	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL092 SDG#: DE036-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry			Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.12	0.0100	0.0100	1
Wet Chemistry			%	%	%	
11624	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 05:05	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/24/2010 03:40	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 13:05	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 07:48	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/23/2010 00:01	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/28/2010 16:15	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 10:04	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL092 SDG#: DE036-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:40	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:26	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:26	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:26	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:46	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 21:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 02:07	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 23:54	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL103 SDG#: DE036-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U 190	560	1
04688	Benzyl alcohol	100-51-6	190	U 190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190	1
04688	4-Chloroaniline	106-47-8	75	U 75	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560	1
04688	2,4-Dinitrophenol	51-28-5	750	U 750	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	380	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	38	U 38	190	1
04688	4-Methylphenol	106-44-5	38	U 38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	38	U 38	190	1
04688	4-Nitroaniline	100-01-6	75	U 75	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	560	1

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL103 SDG#: DE036-18

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

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75 U	0.75	1.9	1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38 U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.75 U	0.75	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.88 J	0.75	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	2.0	0.75	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.75 U	0.75	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.75 U	0.75	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8 U	6.8	20	1
10138	Di-n-butylphthalate	84-74-2	6.8 U	6.8	20	1
10138	Chrysene	218-01-9	1.7 J	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.75 U	0.75	1.9	1
10138	Diethylphthalate	84-66-2	6.8 U	6.8	20	1
10138	Dimethylphthalate	131-11-3	6.8 U	6.8	20	1
10138	Fluoranthene	206-44-0	2.5	0.75	1.9	1
10138	Fluorene	86-73-7	0.75 U	0.75	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.96 J	0.75	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.75 U	0.75	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.75 U	0.75	1.9	1
10138	Naphthalene	91-20-3	0.91 J	0.75	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.75 U	0.75	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.8 U	6.8	20	1
10138	Phenanthrene	85-01-8	1.3 J	0.75	1.9	1
10138	Pyrene	129-00-0	1.9	0.75	1.9	1

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.1
10401	Dalapon	75-99-0	5.0 U	5.0	10
10401	2,4-DB	94-82-6	3.7	0.70	1.9
10401	Dicamba	1918-00-9	0.45 U	0.45	1.4
10401	Dinoseb	88-85-7	0.90 U	0.90	2.7
10401	2,4-DP (Dichlorprop)	120-36-5	0.90 U	0.90	1.9
10401	MCPA	94-74-6	550	86	280
10401	MCPP (Mecoprop)	93-65-2	84 U	84	280
10401	2,4,5-T	93-76-5	0.092 U	0.092	0.19
10401	2,4,5-TP	93-72-1	0.084 U	0.084	0.19

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL103 SDG#: DE036-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.074 U	0.074	0.19	1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.19	1
01363	Beta BHC	319-85-7	0.068 U	0.068	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.19	1
01363	Chlordane	57-74-9	0.90 U	0.90	3.8	1
01363	p,p-DDD	72-54-8	0.074 U	0.074	0.38	1
01363	p,p-DDE	72-55-9	0.11 U	0.11	0.38	1
01363	p,p-DDT	50-29-3	0.074 U	0.074	0.38	1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19	1
01363	Dieldrin	60-57-1	0.074 U	0.074	0.38	1
01363	Endosulfan I	959-98-8	0.075 U	0.075	0.19	1
01363	Endosulfan II	33213-65-9	0.080 U	0.080	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.074 U	0.074	0.38	1
01363	Endrin	72-20-8	0.074 U	0.074	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.074 U	0.074	0.38	1
01363	Endrin Ketone	53494-70-5	0.074 U	0.074	0.38	1
01363	Heptachlor	76-44-8	0.068 U	0.068	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.70 U	0.70	0.70	1
01363	Methoxychlor	72-43-5	0.38 U	0.38	1.9	1
01363	Mirex	2385-85-5	0.074 U	0.074	0.38	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.4	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	5.6 U	5.6	19	5
10225	Aroclor 5442	12642-23-8	5.6 U	5.6	19	5
10225	Aroclor 5460	11126-42-4	5.6 U	5.6	19	5
10225	PCB-1016	12674-11-2	1.9 U	1.9	9.6	5
10225	PCB-1221	11104-28-2	2.8 U	2.8	9.6	5
10225	PCB-1232	11141-16-5	2.9 U	2.9	9.6	5
10225	PCB-1242	53469-21-9	2.8 U	2.8	9.6	5
10225	PCB-1248	12672-29-6	1.9 U	1.9	9.6	5
10225	PCB-1254	11097-69-1	26	1.9	9.6	5
10225	PCB-1260	11096-82-5	1.9 U	1.9	9.6	5
10225	PCB-1262	37324-23-5	1.9 U	1.9	9.6	5
10225	PCB-1268	11100-14-4	1.9 U	1.9	9.6	5
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	27,400	5.50	21.9	1
07914	Boron	7440-42-8	7.62	0.973	5.47	1
01650	Calcium	7440-70-2	7,790	6.70	21.9	1
01654	Iron	7439-89-6	36,600	10.3	43.7	2

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL103 SDG#: DE036-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	40.6	0.24	2.2	1
01657	Magnesium	7439-95-4	8,970	2.78	10.9	1
06958	Manganese	7439-96-5	371	0.0853	0.547	1
10145	Phosphorus	7723-14-0	532	0.612	10.9	1
01662	Potassium	7440-09-7	5,820	19.7	54.7	1
01667	Sodium	7440-23-5	129	40.8	109	1
07968	Strontium	7440-24-6	33.6	0.0678	0.547	1
06969	Tin	7440-31-5	2.33 J	1.09	10.9	1
06970	Titanium	7440-32-6	1,690	0.428	1.13	1
10146	Zirconium	7440-67-7	5.02 J	0.918	5.47	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0708 J	0.0669	0.223	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	8.89	0.0669	0.446	2
06126	Barium	7440-39-3	163	0.120	0.446	2
06127	Beryllium	7440-41-7	0.976	0.0178	0.111	2
06128	Cadmium	7440-43-9	0.252	0.0401	0.111	2
06131	Chromium	7440-47-3	45.8	0.134	0.446	2
06132	Cobalt	7440-48-4	14.0	0.0223	0.111	2
06133	Copper	7440-50-8	19.4	0.0736	0.446	2
06135	Lead	7439-92-1	13.6	0.0116	0.223	2
06138	Molybdenum	7439-98-7	0.455	0.0557	0.111	2
06139	Nickel	7440-02-0	23.7	0.111	0.446	2
06141	Selenium	7782-49-2	0.273 J	0.0446	0.446	2
06142	Silver	7440-22-4	0.0321 J	0.0134	0.111	2
06145	Thallium	7440-28-0	0.538	0.0334	0.111	2
06148	Vanadium	7440-62-2	90.2	0.0245	0.111	2
06149	Zinc	7440-66-6	117	0.624	3.34	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.106	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.8	0.90	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	455	10.0	10.0	1

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL103 SDG#: DE036-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.		mV	mV	mV	
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.99	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 05:40	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/24/2010 04:13	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 13:33	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 08:02	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/23/2010 00:19	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/28/2010 17:09	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL103 SDG#: DE036-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/28/2010 16:22	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:44	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:29	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:29	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:29	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:48	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 21:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 02:31	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/06/2011 00:02	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL089 SDG#: DE036-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Butylbenzylphthalate	85-68-7	99,000	1,800	18,000	100
04688	Di-n-butylphthalate	84-74-2	210	18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	330	J 18	360	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL089 SDG#: DE036-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	540	1
04688	Phenol	108-95-2	18	U 18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180	1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
3,3'-dichlorobenzidine						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8	1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	2.4	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	3.4	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	9.2	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	2.5	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	7.3	0.71	1.8	1
10138	Chrysene	218-01-9	6.5	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.0	J 0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19	1
10138	Fluoranthene	206-44-0	4.0	0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U 0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U 0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U 0.71	1.8	1
10138	Naphthalene	91-20-3	0.71	U 0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U 0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	10	J 6.4	19	1
10138	Phenanthrene	85-01-8	1.8	J 0.71	1.8	1
10138	Pyrene	129-00-0	3.9	0.71	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3	U 1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U 4.7	9.6	1
10401	2,4-DB	94-82-6	1.7	U 1.7	1.8	1
10401	Dicamba	1918-00-9	0.43	U 0.43	1.3	1
10401	Dinoseb	88-85-7	0.86	U 0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86	U 0.86	1.8	1
10401	MCPA	94-74-6	81	U 81	270	1
10401	MCPP (Mecoprop)	93-65-2	80	U 80	270	1
10401	2,4,5-T	93-76-5	0.088	J 0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U 0.080	0.18	1

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL089 SDG#: DE036-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.071 U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.066 U	0.066	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.058 U	0.058	0.18	1
01363	Chlordane	57-74-9	6.6 U	6.6	6.6	1
01363	p,p-DDD	72-54-8	0.071 U	0.071	0.36	1
01363	p,p-DDE	72-55-9	1.1 U	1.1	1.1	1
01363	p,p-DDT	50-29-3	1.7 U	1.7	1.7	1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.56 U	0.56	0.56	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.12 U	0.12	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.071 U	0.071	0.36	1
01363	Endrin	72-20-8	0.071 U	0.071	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.36 U	0.36	0.36	1
01363	Endrin Ketone	53494-70-5	0.071 U	0.071	0.36	1
01363	Heptachlor	76-44-8	0.17 U	0.17	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.23 U	0.23	0.23	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.071 U	0.071	0.36	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.1	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	5.4 U	5.4	18	5
10225	Aroclor 5442	12642-23-8	5.4 U	5.4	18	5
10225	Aroclor 5460	11126-42-4	6.6 J	5.4	18	5
10225	PCB-1016	12674-11-2	1.8 U	1.8	9.1	5
10225	PCB-1221	11104-28-2	2.7 U	2.7	9.1	5
10225	PCB-1232	11141-16-5	2.8 U	2.8	9.1	5
10225	PCB-1242	53469-21-9	2.7 U	2.7	9.1	5
10225	PCB-1248	12672-29-6	30	1.8	9.1	5
10225	PCB-1254	11097-69-1	13	1.8	9.1	5
10225	PCB-1260	11096-82-5	6.6 J	1.8	9.1	5
10225	PCB-1262	37324-23-5	1.8 U	1.8	9.1	5
10225	PCB-1268	11100-14-4	1.8 U	1.8	9.1	5

The stated QC limits are advisory only until sufficient data points

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL089 SDG#: DE036-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,900	5.23	20.8	1
07914	Boron	7440-42-8	8.79	0.926	5.20	1
01650	Calcium	7440-70-2	18,700	6.38	20.8	1
01654	Iron	7439-89-6	20,600	4.90	20.8	1
01656	Lithium	7439-93-2	21.7	0.23	2.1	1
01657	Magnesium	7439-95-4	4,940	2.64	10.4	1
06958	Manganese	7439-96-5	277	0.0812	0.520	1
10145	Phosphorus	7723-14-0	543	0.583	10.4	1
01662	Potassium	7440-09-7	3,240	18.7	52.0	1
01667	Sodium	7440-23-5	205	38.8	104	1
07968	Strontium	7440-24-6	50.5	0.0645	0.520	1
06969	Tin	7440-31-5	2.20 J	1.04	10.4	1
06970	Titanium	7440-32-6	1,200	0.388	1.02	1
10146	Zirconium	7440-67-7	3.43 J	0.874	5.20	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.297	0.0637	0.212	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.50	0.0637	0.424	2
06126	Barium	7440-39-3	155	0.287	1.06	5
06127	Beryllium	7440-41-7	0.654	0.0170	0.106	2
06128	Cadmium	7440-43-9	0.664	0.0382	0.106	2
06131	Chromium	7440-47-3	38.6	0.127	0.424	2
06132	Cobalt	7440-48-4	7.96	0.0212	0.106	2
06133	Copper	7440-50-8	19.4	0.0700	0.424	2
06135	Lead	7439-92-1	34.0	0.0110	0.212	2
06138	Molybdenum	7439-98-7	11.2	0.0531	0.106	2
06139	Nickel	7440-02-0	19.8	0.106	0.424	2
06141	Selenium	7782-49-2	0.123 J	0.0424	0.424	2
06142	Silver	7440-22-4	0.0831 J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.288	0.0318	0.106	2
06148	Vanadium	7440-62-2	56.6	0.0233	0.106	2
06149	Zinc	7440-66-6	150	0.594	3.18	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.155	0.0030	0.103	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.86 U	0.86	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.2	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.58 J	0.21	1.1	1

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL089 SDG#: DE036-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	429	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.58	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 06:14	Gregory J Drahovsky	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 10:53	Joseph M Gambler	100
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/24/2010 04:46	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 14:55	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 08:32	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/23/2010 00:38	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL089 SDG#: DE036-19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 10:19	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:48	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/28/2010 16:23	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:32	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:32	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:49	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 22:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 02:55	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/06/2011 00:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL236 SDG#: DE036-20*

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

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL236 SDG#: DE036-20*

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

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

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	2.2	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	3.6	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71 U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	3.7	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71 U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4 J	6.4	19	1
10138	Chrysene	218-01-9	13	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.7 J	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Fluoranthene	206-44-0	1.7 J	0.71	1.8	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.6 J	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71 U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	11 J	6.4	19	1
10138	Phenanthrene	85-01-8	1.1 J	0.71	1.8	1
10138	Pyrene	129-00-0	2.7	0.71	1.8	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	8.2		0.66	1.8	1
10401	Dicamba	1918-00-9	0.45	J	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	610		81	270	1
10401	MCPP (Mecoprop)	93-65-2	480	U	480	480	1
10401	2,4,5-T	93-76-5	0.33		0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL236 SDG#: DE036-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPP represent the lowest reporting limits attainable.						
Perchlorate						
06557	6a Perchlorate EPA 6850	14797-73-0	2.2 U	2.2	5.3	1
Pesticides/PCBs						
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.17 U	0.17	0.36	1
01363	p,p-DDT	50-29-3	0.47 U	0.47	0.47	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.11 U	0.11	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.13 U	0.13	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs						
10225	Aroclor 5432	63496-31-1	5.3 U	5.3	18	5
10225	Aroclor 5442	12642-23-8	5.3 U	5.3	18	5
10225	Aroclor 5460	11126-42-4	5.3 U	5.3	18	5
10225	PCB-1016	12674-11-2	1.8 U	1.8	9.0	5
10225	PCB-1221	11104-28-2	2.7 U	2.7	9.0	5
10225	PCB-1232	11141-16-5	2.8 U	2.8	9.0	5
10225	PCB-1242	53469-21-9	2.7 U	2.7	9.0	5
10225	PCB-1248	12672-29-6	1.8 U	1.8	9.0	5
10225	PCB-1254	11097-69-1	77	1.8	9.0	5
10225	PCB-1260	11096-82-5	1.8 U	1.8	9.0	5
10225	PCB-1262	37324-23-5	1.8 U	1.8	9.0	5
10225	PCB-1268	11100-14-4	1.8 U	1.8	9.0	5

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL236 SDG#: DE036-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,800	5.29	21.0	1
07914	Boron	7440-42-8	7.12	0.936	5.26	1
01650	Calcium	7440-70-2	12,100	6.45	21.0	1
01654	Iron	7439-89-6	24,100	4.96	21.0	1
01656	Lithium	7439-93-2	23.6	0.23	2.1	1
01657	Magnesium	7439-95-4	5,690	2.67	10.5	1
06958	Manganese	7439-96-5	301	0.0821	0.526	1
10145	Phosphorus	7723-14-0	546	0.589	10.5	1
01662	Potassium	7440-09-7	4,170	18.9	52.6	1
01667	Sodium	7440-23-5	160	39.2	105	1
07968	Strontium	7440-24-6	38.4	0.0652	0.526	1
06969	Tin	7440-31-5	2.25 J	1.05	10.5	1
06970	Titanium	7440-32-6	1,180	0.400	1.05	1
10146	Zirconium	7440-67-7	1.19 J	0.884	5.26	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.152 J	0.0625	0.208	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.85	0.0625	0.417	2
06126	Barium	7440-39-3	130	0.113	0.417	2
06127	Beryllium	7440-41-7	0.538	0.0167	0.104	2
06128	Cadmium	7440-43-9	0.377	0.0375	0.104	2
06131	Chromium	7440-47-3	27.9	0.125	0.417	2
06132	Cobalt	7440-48-4	8.08	0.0208	0.104	2
06133	Copper	7440-50-8	14.7	0.0688	0.417	2
06135	Lead	7439-92-1	10.6	0.0108	0.208	2
06138	Molybdenum	7439-98-7	0.843	0.0521	0.104	2
06139	Nickel	7440-02-0	16.9	0.104	0.417	2
06141	Selenium	7782-49-2	0.160 J	0.0417	0.417	2
06142	Silver	7440-22-4	0.0265 J	0.0125	0.104	2
06145	Thallium	7440-28-0	0.295	0.0313	0.104	2
06148	Vanadium	7440-62-2	49.6	0.0229	0.104	2
06149	Zinc	7440-66-6	115	0.583	3.13	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0341 J	0.0028	0.0993	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.85 U	0.85	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	31.9	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.1	1

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL236 SDG#: DE036-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	405	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.55	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	5.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 06:48	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/29/2010 04:30	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 15:23	John W Perkins	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103500019A	12/21/2010 19:18	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 08:46	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/29/2010 01:50	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103500019A	12/17/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
07914	Boron	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL236 SDG#: DE036-20*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
01654	Iron	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
01656	Lithium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
06958	Manganese	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
01662	Potassium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
01667	Sodium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
07968	Strontium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
06969	Tin	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
06970	Titanium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:51	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103545708005	12/20/2010 20:07	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 22:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/29/2010 22:06	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/06/2011 00:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1

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



Analysis Report

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

Page 7 of 7

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

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

Submitted: 12/14/2010 10:05

Reported: 01/14/2011 23:09

SL236 SDG#: DE036-20*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10350SLG026	Sample number(s): 6163596-6163601, 6163603-6163618								
Acenaphthene	17	U	17.	170	ug/kg	98	76-111		
Acenaphthylene	17	U	17.	170	ug/kg	99	75-122		
Aniline	170		170.	500	ug/kg	42	10-107		
	U								
Anthracene	17	U	17.	170	ug/kg	97	76-112		
Benzidine	1,200		1,200.	3,300	ug/kg	32	15-121		
	U								
Benzo(a)anthracene	17	U	17.	170	ug/kg	99	73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	92	69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	93	61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	97	65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	94	67-125		
Benzoic acid	170		170.	500	ug/kg	65	10-154		
	U								
Benzyl alcohol	170		170.	500	ug/kg	79	68-111		
	U								
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	91	79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	80	75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	86	79-112		
Carbazole	17	U	17.	170	ug/kg	99	77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	88	74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	59	10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	98	70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	86	70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	88	68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	83	67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	92	72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	96	79-110		
Chrysene	17	U	17.	170	ug/kg	100	76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	98	70-128		
Dibenzofuran	17	U	17.	170	ug/kg	100	79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	86	79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	87	70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	88	74-106		
3,3'-Dichlorobenzidine	100		100.	330	ug/kg	31*	38-105		
	U								
2,4-Dichlorophenol	17	U	17.	170	ug/kg	94	75-111		
Diethylphthalate	17	U	17.	170	ug/kg	97	76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	97	72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	103	70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	98	77-109		
4,6-Dinitro-2-methylphenol	170		170.	500	ug/kg	70	53-110		
	U								
2,4-Dinitrophenol	670		670.	2,000	ug/kg	67	37-120		
	U								
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	94	73-115		

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	96		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	103		77-111		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	83		75-117		
Fluoranthene	17 U	17.	170	ug/kg	98		78-116		
Fluorene	17 U	17.	170	ug/kg	99		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	96		78-116		
Hexachlorobutadiene	67 U	67.	170	ug/kg	96		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	95		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	84		68-105		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	97		64-119		
Isophorone	17 U	17.	170	ug/kg	86		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	98		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	91		76-105		
2-Methylphenol	33 U	33.	170	ug/kg	92		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	88		66-117		
Naphthalene	17 U	17.	170	ug/kg	93		73-106		
2-Nitroaniline	17 U	17.	170	ug/kg	90		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	85		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	60		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	99		71-104		
2-Nitrophenol	17 U	17.	170	ug/kg	88		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	98		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	76		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	82		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	100		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	69		68-130		
Pentachlorophenol	170 U	170.	500	ug/kg	70		35-106		
Phenanthrene	17 U	17.	170	ug/kg	99		77-113		
Phenol	17 U	17.	170	ug/kg	96		58-112		
Pyrene	17 U	17.	170	ug/kg	99		75-115		
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	92		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	96		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	93		78-111		
Batch number: 10350SLH026 Sample number(s): 6163596-6163601, 6163603-6163618									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	87		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	93		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	95		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	93		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	93		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	105		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	89		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	94		66-137		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	107		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	109		84-132		
Chrysene	0.33 U	0.33	1.7	ug/kg	93		79-120		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	88		62-142		
Diethylphthalate	6.0 U	6.0	18	ug/kg	112		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	103		70-130		
Bis(2-Ethylhexyl)phthalate	8.2 J	6.0	18	ug/kg	121		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	97		78-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	96		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	88		62-141		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	89		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	80		62-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

<u>Analysis Name</u>	<u>Blank Result</u>		<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Naphthalene	0.67	U	0.67	1.7	ug/kg	84		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	92		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	110		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	92		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	96		56-121		
Batch number: 103550017A	Sample number(s): 6163596-6163601, 6163603-6163618									
2,4-D	1.2	U	1.2	3.6	ug/kg	107		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	57		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	100		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	73		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	6*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	90		60-141		
MCPA	76	U	76.	250	ug/kg	80		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	92		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	80		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	73		48-138		
Batch number: 103500019A	Sample number(s): 6163618									
6a Perchlorate EPA 6850	7.0		2.1	5.0	ug/kg	120*		85-115		
Batch number: 103510030A	Sample number(s): 6163596-6163601, 6163603-6163618									
Aldrin	0.066	U	0.066	0.17	ug/kg	87		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	97		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	84		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	103		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	127		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	103		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	128		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	88		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	100		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	97		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	102		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	105		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	112		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	92		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	105		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	124		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	97		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	130*		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 103510031A	Sample number(s): 6163596-6163601, 6163603-6163618									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	80	74*	75-125	7	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	84		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	103		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 103511026002A	Sample number(s): 6163596-6163618								
Antimony	0.0577 U	0.0577	0.192	mg/kg	55		11-208		
Arsenic	0.0577 U	0.0577	0.385	mg/kg	95		80-120		
Beryllium	0.0154 U	0.0154	0.0962	mg/kg	98		82-118		
Cadmium	0.0346 U	0.0346	0.0962	mg/kg	92		82-118		
Chromium	0.115 U	0.115	0.385	mg/kg	105		80-120		
Cobalt	0.0192 U	0.0192	0.0962	mg/kg	99		82-118		
Copper	0.242 J	0.0635	0.385	mg/kg	104		80-120		
Lead	0.0100 U	0.0100	0.192	mg/kg	96		80-120		
Nickel	0.0962 U	0.0962	0.385	mg/kg	102		80-120		
Silver	0.0115 U	0.0115	0.0962	mg/kg	93		66-134		
Thallium	0.0288 U	0.0288	0.0962	mg/kg	98		81-119		
Vanadium	0.0212 U	0.0212	0.0962	mg/kg	90		90-110		
Zinc	0.538 U	0.538	2.88	mg/kg	97		78-122		
Batch number: 103511026002B	Sample number(s): 6163596-6163618								
Selenium	0.0385 U	0.0385	0.385	mg/kg	94		79-122		
Batch number: 103511026002C	Sample number(s): 6163596-6163618								
Molybdenum	0.0481 U	0.0481	0.0962	mg/kg	92		78-122		
Batch number: 103511026002D	Sample number(s): 6163596-6163618								
Barium	0.104 U	0.104	0.385	mg/kg	98		79-121		
Batch number: 103515708004	Sample number(s): 6163596-6163617								
Aluminum	7.29 J	5.03	20.0	mg/kg	86		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	86		78-110		
Calcium	12.8 J	6.13	20.0	mg/kg	90		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	84		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	101		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	88		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	95		81-119		
Phosphorus	1.08 J	0.560	10.0	mg/kg	98		80-120		
Potassium	18.0 U	18.0	50.0	mg/kg	89		78-110		
Sodium	37.3 U	37.3	100	mg/kg	90		87-110		
Strontium	0.0650 J	0.0620	0.500	mg/kg	97		79-121		
Tin	1.20 J	1.00	10.0	mg/kg	97		90-114		
Zirconium	0.840 U	0.840	5.00	mg/kg	99		80-120		
Batch number: 103515711003	Sample number(s): 6163596-6163618								
Mercury	0.0028 U	0.0028	0.0977	mg/kg	97		88-123		
Batch number: 103545708005	Sample number(s): 6163618								
Aluminum	5.43 J	5.03	20.0	mg/kg	106		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	94		78-110		
Calcium	12.3 J	6.13	20.0	mg/kg	103		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	105		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	103		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	104		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	101		81-119		
Phosphorus	1.70 J	0.560	10.0	mg/kg	106		80-120		
Potassium	18.0 U	18.0	50.0	mg/kg	102		78-110		
Sodium	37.3 U	37.3	100	mg/kg	102		87-110		
Strontium	0.0620 U	0.0620	0.500	mg/kg	106		79-121		
Tin	1.37 J	1.00	10.0	mg/kg	98		90-114		
Titanium	0.380 U	0.380	1.00	mg/kg	110		80-120		
Zirconium	0.840 U	0.840	5.00	mg/kg	103		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 103555708003 Titanium	0.365 U	0.365	0.962	mg/kg	99		80-120		
Batch number: 10362362204A 7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	100		85-115		
Batch number: 10362362204B 7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	100		85-115		
Batch number: 11003003201A 11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	93		90-110		
Batch number: 11003003201B 11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	93		90-110		
Batch number: 11004243201A 3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	93		80-120		
Batch number: 10349039402A 22a pH by 9045C					100		95-105		
Batch number: 10349039402B 22a pH by 9045C					100		95-105		
Batch number: 10349182102A Oxidation Reduction Potential					99		98-102		
Batch number: 10349182102B Oxidation Reduction Potential					99		98-102		
Batch number: 10349162403A 28a Moisture Content by 160.3					100		80-120		
Batch number: 10349162403B 28a Moisture Content by 160.3					100		80-120		
Batch number: 10349162403B 28a Moisture Content by 160.3					100		80-120		
Batch number: 10349162403B 28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 10350SLG026	Sample number(s): 6163596-6163601, 6163603-6163618 UNSPK: 6163599								
Acenaphthene	99	97	75-115	2	30				
Acenaphthylene	103	98	49-126	5	30				
Aniline	49	37	14-114	28	30				
Anthracene	100	98	75-115	2	30				
Benzidine	16*	20*	35-141	22	30				
Benzo(a)anthracene	101	102	65-122	0	30				
Benzo(a)pyrene	86	87	57-126	1	30				
Benzo(b)fluoranthene	90	88	59-125	2	30				

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Quality Control Summary

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Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

Sample Matrix Quality Control

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

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(g,h,i)perylene	91	90	59-127	1	30				
Benzo(k)fluoranthene	90	88	56-132	2	30				
Benzoic acid	45	33	10-173	31*	30				
Benzyl alcohol	87	88	55-123	1	30				
4-Bromophenyl-phenylether	91	93	67-129	2	30				
Butylbenzylphthalate	97	101	73-134	4	30				
Di-n-butylphthalate	94	93	67-123	1	30				
Carbazole	100	98	64-120	3	30				
4-Chloro-3-methylphenol	93	93	53-130	0	30				
4-Chloroaniline	73	61	23-95	18	30				
bis(2-Chloroethoxy)methane	100	98	54-117	3	30				
bis(2-Chloroethyl)ether	97	93	60-116	5	30				
bis(2-Chloroisopropyl)ether	90	90	55-142	0	30				
2-Chloronaphthalene	82	78	50-141	5	30				
2-Chlorophenol	93	94	73-121	1	30				
4-Chlorophenyl-phenylether	97	93	64-119	4	30				
Chrysene	104	102	62-128	1	30				
Dibenz(a,h)anthracene	91	90	65-125	0	30				
Dibenzofuran	102	96	71-112	6	30				
1,2-Dichlorobenzene	91	90	66-108	0	30				
1,3-Dichlorobenzene	90	89	63-109	2	30				
1,4-Dichlorobenzene	92	87	53-113	5	30				
3,3'-Dichlorobenzidine	72	56	25-123	25	30				
2,4-Dichlorophenol	99	97	78-117	2	30				
Diethylphthalate	94	93	66-118	2	30				
2,4-Dimethylphenol	97	95	56-130	2	30				
3,5-Dimethylphenol	103	104	70-130	0	30				
Dimethylphthalate	97	94	64-118	3	30				
4,6-Dinitro-2-methylphenol	64	49	10-148	26	30				
2,4-Dinitrophenol	40	25	20-143	47*	30				
2,4-Dinitrotoluene	94	91	57-114	3	30				
2,6-Dinitrotoluene	97	95	69-123	3	30				
1,2-Diphenylhydrazine	107	105	71-129	2	30				
bis(2-Ethylhexyl)phthalate	97	100	63-122	3	30				
Fluoranthene	101	97	59-122	4	30				
Fluorene	98	95	60-125	3	30				
Hexachlorobenzene	97	97	61-111	0	30				
Hexachlorobutadiene	96	97	62-120	1	30				
Hexachlorocyclopentadiene	89	84	10-153	6	30				
Hexachloroethane	85	86	57-109	2	30				
Indeno(1,2,3-cd)pyrene	92	90	61-126	2	30				
Isophorone	90	91	51-118	1	30				
1-Methylnaphthalene	99	96	73-112	4	30				
2-Methylnaphthalene	93	91	76-114	2	30				
2-Methylphenol	93	92	47-142	1	30				
4-Methylphenol	88	91	55-126	3	30				
Naphthalene	94	90	72-116	4	30				
2-Nitroaniline	99	97	67-125	2	30				
3-Nitroaniline	95	86	59-122	10	30				
4-Nitroaniline	78	62	52-112	23	30				
Nitrobenzene	99	97	51-114	1	30				
2-Nitrophenol	90	87	74-115	4	30				
4-Nitrophenol	94	89	39-133	5	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
N-Nitroso-di-n-propylamine	80	84	60-116	5	30				
N-Nitrosodimethylamine	87	84	47-116	3	30				
N-Nitrosodiphenylamine	100	98	86-145	2	30				
Di-n-octylphthalate	80	83	56-126	4	30				
Pentachlorophenol	87	71	17-149	19	30				
Phenanthrene	101	100	65-125	2	30				
Phenol	97	95	58-126	2	30				
Pyrene	103	106	51-151	3	30				
1,2,4-Trichlorobenzene	97	94	72-115	2	30				
2,4,5-Trichlorophenol	94	93	34-139	2	30				
2,4,6-Trichlorophenol	100	95	49-140	4	30				
Batch number: 10350SLH026 Sample number(s): 6163596-6163601,6163603-6163618 UNSPK: 6163599									
Acenaphthene	90	90	63-105	1	30				
Acenaphthylene	49*	52*	55-126	2	30				
Anthracene	78	77	46-136	0	30				
Benzo(a)anthracene	-87*	-90*	39-144	3	30				
Benzo(a)pyrene	-461	-441	34-156	12	30				
	(2)	(2)							
Benzo(b)fluoranthene	-1536	-1472	43-155	18	30				
	(2)	(2)							
Benzo(g,h,i)perylene	-401	-387	33-141	9	30				
	(2)	(2)							
Benzo(k)fluoranthene	-148*	-137*	42-144	10	30				
Butylbenzylphthalate	112	117	73-140	5	30				
Di-n-butylphthalate	109	111	78-160	1	30				
Chrysene	-1058	-999	29-156	24	30				
	(2)	(2)							
Dibenz(a,h)anthracene	-49*	-47*	41-130	2	30				
Diethylphthalate	105	107	87-131	2	30				
Dimethylphthalate	100	100	74-118	0	30				
Bis(2-Ethylhexyl)phthalate	87	88	39-167	1	30				
Fluoranthene	-326	-323	26-166	2	30				
	(2)	(2)							
Fluorene	94	94	45-121	1	30				
Indeno(1,2,3-cd)pyrene	-643	-617	21-143	15	30				
	(2)	(2)							
1-Methylnaphthalene	93	92	72-123	0	30				
2-Methylnaphthalene	81	81	28-121	1	30				
Naphthalene	79	79	61-102	0	30				
N-Nitrosodimethylamine	97	101	48-113	4	30				
Di-n-octylphthalate	101	99	40-192	2	30				
Phenanthrene	-43*	-40*	12-165	3	30				
Pyrene	-111*	-113*	15-153	1	30				
Batch number: 103550017A Sample number(s): 6163596-6163601,6163603-6163618 UNSPK: 6163599									
2,4-D	95	70	28-161	31	35				
Dalapon	81	0*	12-86	200*	50				
2,4-DB	42	81	20-170	62*	50				
Dicamba	154*	127*	33-120	20	50				
Dinoseb	13	15	1-44	21	35				
2,4-DP (Dichlorprop)	114	111	55-141	2	50				
MCPA	140	171	31-184	20	50				

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Quality Control Summary

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Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
MCPP (Mecoprop)	80	61	16-174	28	50				
2,4,5-T	61	30	25-132	68*	35				
2,4,5-TP	81	92	10-183	13	35				
Batch number: 103500019A 6a Perchlorate EPA 6850	Sample number(s): 6163618 UNSPK: P163599 100 100 80-120 0 20								
Batch number: 103510030A	Sample number(s): 6163596-6163601,6163603-6163618 UNSPK: 6163599								
Aldrin	132*	94	16-126	34	50				
Alpha BHC	109	115	10-129	5	50				
Beta BHC	84	122	14-147	36	50				
Gamma BHC - Lindane	127	124	10-140	2	50				
p,p-DDD	119	110	16-163	8	50				
p,p-DDE	127	103	18-161	21	50				
p,p-DDT	168	245*	10-176	37	50				
Delta BHC	94	125	23-140	29	50				
Dieldrin	0*	127	19-154	200*	50				
Endosulfan I	85	82	16-137	4	50				
Endosulfan II	90	63	28-154	35	50				
Endosulfan Sulfate	97	121	21-160	22	50				
Endrin	0*	112	11-149	200*	50				
Endrin Aldehyde	115	90	10-148	24	35				
Endrin Ketone	110	73	22-165	41	50				
Heptachlor	0*	115	13-126	200*	50				
Heptachlor Epoxide	126	103	13-157	20	50				
Methoxychlor	125	115	32-147	8	50				
Batch number: 103510031A PCB-1016 PCB-1260	Sample number(s): 6163596-6163601,6163603-6163618 UNSPK: 6163599 120 114 29-146 5 50 109 128 39-149 11 50								
Batch number: 103511026002A	Sample number(s): 6163596-6163618 UNSPK: 6163599 BKG: 6163599								
Antimony	40*	20*	75-125	56*	20	0.0956 J	0.0577 U	200* (1)	20
Arsenic	188*	166*	75-125	6	20	5.78	7.26	23*	20
Beryllium	146*	142*	75-125	5	20	0.649	1.00	43*	20
Cadmium	133*	139*	75-125	1	20	0.197	0.254	25* (1)	20
Chromium	160*	157*	75-125	2	20	23.9	25.8	8	20
Cobalt	127*	126*	75-125	4	20	6.89	8.56	22*	20
Copper	138*	151*	75-125	3	20	11.2	15.6	33*	20
Lead	179*	193*	75-125	1	20	8.60	12.5	37*	20
Nickel	136*	143*	75-125	1	20	13.9	18.9	31*	20
Silver	123	129*	75-125	1	20	0.226	0.364	47* (1)	20
Thallium	120	121	75-125	2	20	0.334	0.313	6 (1)	20
Vanadium	204 (2)	201 (2)	75-125	2	20	42.0	48.4	14	20
Zinc	222 (2)	321 (2)	75-125	7	20	92.3	109	16	20
Batch number: 103511026002B Selenium	Sample number(s): 6163596-6163618 UNSPK: 6163599 BKG: 6163599 88 87 75-125 5 20 0.0876 J 0.0954 J 9 (1) 20								
Batch number: 103511026002C Molybdenum	Sample number(s): 6163596-6163618 UNSPK: 6163599 BKG: 6163599 134* 134* 75-125 4 20 0.581 0.551 5 20								
Batch number: 103511026002D	Sample number(s): 6163596-6163618 UNSPK: 6163599 BKG: 6163599								

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Quality Control Summary

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Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Barium	313 (2)	247 (2)	75-125	5	20	112	149	28*	20
Batch number: 103515708004	Sample number(s): 6163596-6163617 UNSPK: 6163599 BKG: 6163599								
Aluminum	1507 (2)	1477 (2)	75-125	1	20	13,500	13,700	1	20
Boron	89	89	84-115	5	20	3.89 J	3.80 J	2 (1)	20
Calcium	167 (2)	189 (2)	75-125	4	20	2,790	2,960	6	20
Iron	1042 (2)	1161 (2)	75-125	1	20	19,400	19,600	1	20
Lithium	98	97	82-114	3	20	22.4	21.8	3	20
Magnesium	265 (2)	220 (2)	75-125	1	20	4,200	4,390	4	20
Manganese	149 (2)	139 (2)	75-125	0	20	232	242	4	20
Phosphorus	76	89	75-125	4	20	353	367	4	20
Potassium	119	120	75-125	2	20	2,510	2,350	6	20
Sodium	93	93	75-125	5	20	102	107	5 (1)	20
Strontium	95	95	75-115	4	20	15.7	17.5	11	20
Tin	89	89	80-110	5	20	2.25 J	2.19 J	3 (1)	20
Zirconium	96	95	75-125	4	20	0.945 J	1.60 J	52* (1)	20
Batch number: 103515711003	Sample number(s): 6163596-6163618 UNSPK: 6163599 BKG: 6163599								
Mercury	74	78	65-135	2	20	0.313	0.263	17 (1)	20
Batch number: 103545708005	Sample number(s): 6163618 UNSPK: P162903 BKG: P162903								
Aluminum	1617 (2)	1782 (2)	75-125	1	20	17,100	16,400	4	20
Boron	94	96	84-115	0	20	6.45	6.32	2 (1)	20
Calcium	147 (2)	180 (2)	75-125	4	20	2,170	2,080	4	20
Iron	104 (2)	-167 (2)	75-125	1	20	19,000	18,100	5	20
Lithium	96	102	82-114	3	20	16.5	15.3	8	20
Magnesium	82 (2)	144 (2)	75-125	3	20	3,420	3,260	5	20
Manganese	6 (2)	25 (2)	75-125	2	20	449	413	9	20
Phosphorus	92	96	75-125	1	20	168	164	3	20
Potassium	108	133*	75-125	6	20	2,330	2,180	7	20
Sodium	102	108	75-125	4	20	110	106	4 (1)	20
Strontium	100	103	75-115	1	20	19.6	19.5	0	20
Tin	88	88	80-110	2	20	2.07 J	2.14 J	3 (1)	20
Titanium	302 (2)	338 (2)	75-125	2	20	1,210	1,190	2	20
Zirconium	95	99	75-125	2	20	2.49 J	2.90 J	15 (1)	20
Batch number: 103555708003	Sample number(s): 6163596-6163617 UNSPK: 6163599 BKG: 6163599								
Titanium	445 (2)	352 (2)	75-125	6	20	1,060	1,220	14	20
Batch number: 10362362204A	Sample number(s): 6163596-6163600,6163602-6163608 UNSPK: 6163599 BKG: 6163599								
7a Perchlorate EPA 314.0	96		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 10362362204B	Sample number(s): 6163609-6163618 UNSPK: 6163618 BKG: 6163618								
7a Perchlorate EPA 314.0	96		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11003003201A	Sample number(s): 6163596-6163600,6163602-6163608 UNSPK: 6163599 BKG: 6163599								
11a Anions by 300.0 - Fluoride	78*		80-120			3.2	2.5	24* (1)	20
Batch number: 11003003201B	Sample number(s): 6163609-6163618 UNSPK: 6163610 BKG: 6163610								

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
11a Anions by 300.0 - Fluoride	81		80-120			0.80	U	0.80	U	0 (1)	20
Batch number: 11004243201A	Sample number(s): 6163596-6163600, 6163602-6163618 UNSPK: 6163599 BKG: 6163599										
3a Cr VI by EPA 7199	93		75-125			0.20	U	0.33	J	200* (1)	20
Batch number: 10349039402A	Sample number(s): 6163596-6163599, 6163602-6163607 BKG: 6163599										
22a pH by 9045C						7.67		7.60		1	1
Batch number: 10349039402B	Sample number(s): 6163608-6163618 BKG: 6163618										
22a pH by 9045C						7.55		7.56		0	1
Batch number: 10349182102A	Sample number(s): 6163596-6163599, 6163602-6163607 BKG: 6163599										
Oxidation Reduction Potential						462		472		2	6
Batch number: 10349182102B	Sample number(s): 6163608-6163618 BKG: 6163618										
Oxidation Reduction Potential						405		411		2	6
Batch number: 10349162403A	Sample number(s): 6163596-6163598 BKG: 6163597										
28a Moisture Content by 160.3						8.6		8.6		0	20
Batch number: 10349162403B	Sample number(s): 6163599-6163618 BKG: 6163599										
28a Moisture Content by 160.3						6.3		6.5		2	20
28a Moisture Content by 160.3						6.3		6.5		2	20
28a Moisture Content by 160.3						6.3		6.5		2	20

Surrogate Quality Control

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

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 10350SLG026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163596	101	98	99	81	91	97
6163597	101	97	104	82	88	98
6163598	99	93	105	80	90	102
6163599	88	90	90	73	97	89
6163600	91	91	99	86	94	89
6163601	89	90	96	86	92	92
6163603	95	93	97	79	87	92
6163604	99	95	100	79	91	106
6163605	97	93	98	82	89	100
6163606	98	91	100	82	89	97
6163607	96	92	101	81	90	101
6163608	103	98	103	81	94	100
6163609	96	90	104	82	92	101
6163610	95	93	94	83	91	96
6163611	88	87	94	81	88	96
6163612	96	92	99	82	93	101

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Client Name: CDM Federal Programs Corp.
Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

Surrogate Quality Control

6163613	94	92	90	81	88	93
6163614	88	85	95	75	90	94
6163615	94	92	97	81	91	97
6163616	97	95	100	80	90	105
6163617	96	92	98	81	94	100
6163618	97	92	97	84	95	102
Blank	80	81	80	67	91	90
LCS	88	89	96	83	92	88
MS	91	91	99	86	94	89
MSD	89	90	96	86	92	92

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

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10350SLH026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163596	73	58	55
6163597	96	82	84
6163598	92	82	85
6163599	92	83	91
6163600	95	84	87
6163601	98	85	87
6163603	96	81	84
6163604	90	79	76
6163605	99	87	87
6163606	97	89	86
6163607	95	81	75
6163608	87	82	86
6163609	90	80	81
6163610	83	77	78
6163611	93	83	86
6163612	87	79	84
6163613	98	88	89
6163614	95	83	85
6163615	89	80	84
6163616	89	78	83
6163617	96	84	89
6163618	87	77	96
Blank	94	85	94
LCS	99	87	98
MS	95	84	87
MSD	98	85	87

Limits:	40-130	45-130	45-135

Analysis Name: 12a Pesticides by 8081A
Batch number: 103510030A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6163596	79	86
6163597	77	91
6163598	67	82
6163599	72	46
6163600	86	178*
6163601	75	0*
6163603	84	251*
6163604	116	0*

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Group Number: 1225222

Surrogate Quality Control

6163605	74	95
6163606	81	99
6163607	74	73
6163608	59	57
6163609	60	68
6163610	82	89
6163611	72	56
6163612	72	83
6163613	76	78
6163614	82	83
6163615	78	82
6163616	70	79
6163617	83	80
6163618	85	94
Blank	63	106
LCS	75	100
MS	86	178*
MSD	75	0*

Limits: 50-130 20-120

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 103510031A

Tetrachloro-m-xylene Decachlorobiphenyl

6163596	105	107
6163597	106	113
6163598	97	111
6163599	99	87
6163600	122	116
6163601	114	97
6163603	90	129*
6163604	96	409*
6163605	125	131*
6163606	111	152*
6163607	102	91
6163608	123	122*
6163609	106	94
6163610	91	107
6163611	124	139*
6163612	101	107
6163613	97	101
6163614	113	125*
6163615	100	107
6163616	108	128*
6163617	109	160*
6163618	110	138*
Blank	109	117
LCS	90	101
LCSD	93	107
MS	122	116
MSD	114	97

Limits: 53-139 45-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 103550017A

2,4-Dichlorophenylacetic

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/14/11 at 11:09 PM

Group Number: 1225222

Surrogate Quality Control

acid

6163596	97
6163597	94
6163598	118
6163599	135
6163600	145
6163601	127
6163603	106
6163604	85
6163605	110
6163606	103
6163607	97
6163608	119
6163609	130
6163610	173*
6163611	109
6163612	125
6163613	94
6163614	87
6163615	138
6163616	97
6163617	149
6163618	118
Blank	99
LCS	102
MS	145
MSD	127

Limits: 36-156

*- Outside of specification

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CDM

SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:

*Primary Analyses as indicated on sample labels

****Secondary Analyses as indicated on sample labels**

④ For hex chrome analysis, lab will measure pH and ORP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EP	1,4-Dioxin	SVOCs/EF	TPH-GRC	TPH-EFH	*Metals	*Hex Chl	*Fluorid	*PCBs/EF	*Dioxin	*Pentachlor	Pentachloro	*Pesticide	*Herbicide	**Nitrate	**Form	**n-HD	**Energy	**Cyan	**pH EF	**Terph	**Glyco	**Alcol
SL-007-SA5C-SB-4.0-5.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X					X	X	X	X	X	X	X	X
SL-007-SA5C-SB-9.0-10.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X					X	X	X	X	X	X	X	X
SL-007-SA5C-SB-9.5	12.13.10	1210	soil	none	5 Encore Samplers	X	X		X		X	X	X	X	X	X												
SL-071-SA5B-SS-0.0-0.5MS	12.13.10	1009	soil	none	2 x 16 oz. jarS & 2 6" sleeves			X			X	X	X	X	X	X		X	X									MS sample
SL-072-SA5B-SS-0.0-0.5	12.13.10	0948	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-073-SA5B-SS-0.0-0.5	12.13.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-074-SA5B-SS-0.0-0.5	12.13.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-075-SA5B-SS-0.0-0.5	12.13.10	0903	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-076-SA5B-SS-0.0-0.5	12.13.10	0928	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-078-SA5B-SS-0.0-0.5	12.13.10	1110	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-083-SA5B-SS-0.0-0.5	12.13.10	1049	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-084-SA5B-SS-0.0-0.5	12.13.10	1046	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	5 Encore Samplers	X	X		X												X	X	X	X	X	X	X	X
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar			X		X																		
SL-086-SA5B-SS-0.0-0.5	12.13.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-087-SA5B-SS-0.0-0.5	12.13.10	1317	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-089-SA5B-SS-0.0-0.5	12.13.10	1410	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-091-SA5B-SS-0.0-0.5	12.13.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-092-SA5B-SS-0.0-0.5	12.13.10	1327	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-095-SA5B-SS-0.0-0.5	12.13.10	1440	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-103-SA5B-SS-0.0-0.5	12.13.10	1425	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-139-SA5B-SS-0.0-0.5	12.13.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X									
SL-236-SA5B-SS-0.0-0.5	12.13.10	1310	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X									
SL-301-SA5B-SS-0.0-0.5	12.13.10	0900	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

March 11, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/14/2010

Group Number: 1225224

SDG: DX020

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-078-SA5B-SS-0.0-0.5 Soil	6163633
SL-084-SA5B-SS-0.0-0.5 Soil	6163634
SL-076-SA5B-SS-0.0-0.5 Soil	6163635
SL-071-SA5B-SS-0.0-0.5 Soil	6163636
SL-071-SA5B-SS-0.0-0.5MS Soil	6163637
SL-071-SA5B-SS-0.0-0.5MSD Soil	6163638
SL-139-SA5B-SS-0.0-0.5 Soil	6163639
SL-083-SA5B-SS-0.0-0.5 Soil	6163640
SL-074-SA5B-SS-0.0-0.5 Soil	6163641
SL-301-SA5B-SS-0.0-0.5 Soil	6163642
SL-073-SA5B-SS-0.0-0.5 Soil	6163643
SL-072-SA5B-SS-0.0-0.5 Soil	6163644
DUP04-SA5B-QC-121310 Soil	6163645
SED-029-SIV-SD-0.0-0.5 Sediment	6163646
SED-031-SIV-SD-0.0-0.5 Sediment	6163647
SED-030-SIV-SD-0.0-0.5 Sediment	6163648
SED-040-SIV-SD-0.0-0.5 Sediment	6163649
SL-086-SA5B-SS-0.0-0.5 Soil	6163650
SL-092-SA5B-SS-0.0-0.5 Soil	6163651
SL-103-SA5B-SS-0.0-0.5 Soil	6163652
SL-089-SA5B-SS-0.0-0.5 Soil	6163653
SL-236-SA5B-SS-0.0-0.5 Soil	6163654

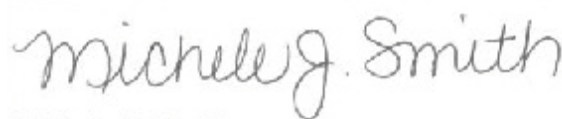
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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

Attn: Todd Burgess

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

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

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

Page 1 of 4

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

LLI Sample # SW 6163633
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS078 SDG#: DX020-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	9.3	0.50	0.50	1

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

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

LLI Sample # SW 6163633
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Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS078 SDG#: DX020-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.134	JQ 0.0423	1.10	1
11031	12378-PeCDD	40321-76-4	0.0916	U 0.0916	5.51	1
11031	123478-HxCDD	39227-28-6	2.52	JB 0.126	5.51	1
11031	123678-HxCDD	57653-85-7	9.75	0.134	5.51	1
11031	123789-HxCDD	19408-74-3	4.70	JB 0.136	5.51	1
11031	1234678-HpCDD	35822-46-9	270	B 0.318	5.51	1
11031	OCDD	3268-87-9	2,640	B 0.372	11.0	1
11031	2378-TCDF	51207-31-9	0.812	JQ 0.121	1.10	1
11031	12378-PeCDF	57117-41-6	1.82	JB 0.0585	5.51	1
11031	23478-PeCDF	57117-31-4	1.69	JB 0.0505	5.51	1
11031	123478-HxCDF	70648-26-9	1.49	JB 0.0946	5.51	1
11031	123678-HxCDF	57117-44-9	1.57	JB 0.0947	5.51	1
11031	123789-HxCDF	72918-21-9	1.05	JB 0.109	5.51	1
11031	234678-HxCDF	60851-34-5	1.89	JB 0.0987	5.51	1
11031	1234678-HpCDF	67562-39-4	26.8	B 0.140	5.51	1
11031	1234789-HpCDF	55673-89-7	2.45	JB 0.146	5.51	1
11031	OCDF	39001-02-0	60.6	B 0.113	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	64	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	45	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	64	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	43	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163633
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10 by BH

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14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS078 SDG#: DX020-01

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

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

LLI Sample # SW 6163633
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS078 SDG#: DX020-01

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 17:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403A	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

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

LLI Sample # SW 6163634
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS084 SDG#: DX020-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.6	0.50	0.50	1

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

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

LLI Sample # SW 6163634
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS084 SDG#: DX020-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.104	J	0.0324	1
11031	12378-PeCDD	40321-76-4	0.883	JBQ	0.0534	1
11031	123478-HxCDD	39227-28-6	1.97	JB	0.0405	1
11031	123678-HxCDD	57653-85-7	3.90	J	0.0411	1
11031	123789-HxCDD	19408-74-3	4.33	JB	0.0418	1
11031	1234678-HpCDD	35822-46-9	129	B	0.0714	1
11031	OCDD	3268-87-9	1,090	B	0.100	1
11031	2378-TCDF	51207-31-9	0.114	J	0.0345	1
11031	12378-PeCDF	57117-41-6	0.257	JB	0.0260	1
11031	23478-PeCDF	57117-31-4	0.239	JB	0.0246	1
11031	123478-HxCDF	70648-26-9	1.01	JB	0.0333	1
11031	123678-HxCDF	57117-44-9	1.28	JB	0.0306	1
11031	123789-HxCDF	72918-21-9	0.379	JB	0.0399	1
11031	234678-HxCDF	60851-34-5	1.75	JB	0.0322	1
11031	1234678-HpCDF	67562-39-4	23.4	B	0.0330	1
11031	1234789-HpCDF	55673-89-7	2.04	JB	0.0493	1
11031	OCDF	39001-02-0	55.4	B	0.0671	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	90	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163634
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS084 SDG#: DX020-02

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

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

LLI Sample # SW 6163634
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS084 SDG#: DX020-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 18:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403A	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

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

LLI Sample # SW 6163635
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS076 SDG#: DX020-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.9	0.50	0.50	1

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

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

LLI Sample # SW 6163635
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS076 SDG#: DX020-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0232 U	0.0232	1.06	1
11031	12378-PeCDD	40321-76-4	0.293 JB	0.0348	5.31	1
11031	123478-HxCDD	39227-28-6	0.447 JBQ	0.0292	5.31	1
11031	123678-HxCDD	57653-85-7	0.984 J	0.0313	5.31	1
11031	123789-HxCDD	19408-74-3	0.899 JB	0.0309	5.31	1
11031	1234678-HpCDD	35822-46-9	19.9 B	0.0499	5.31	1
11031	OCDD	3268-87-9	157 B	0.0635	10.6	1
11031	2378-TCDF	51207-31-9	0.152 JQ	0.0387	1.06	1
11031	12378-PeCDF	57117-41-6	0.211 JB	0.0192	5.31	1
11031	23478-PeCDF	57117-31-4	0.270 JBQ	0.0179	5.31	1
11031	123478-HxCDF	70648-26-9	0.350 JB	0.0286	5.31	1
11031	123678-HxCDF	57117-44-9	0.360 JB	0.0256	5.31	1
11031	123789-HxCDF	72918-21-9	0.190 JB	0.0335	5.31	1
11031	234678-HxCDF	60851-34-5	0.373 JB	0.0275	5.31	1
11031	1234678-HpCDF	67562-39-4	3.62 JB	0.0240	5.31	1
11031	1234789-HpCDF	55673-89-7	0.468 JB	0.0356	5.31	1
11031	OCDF	39001-02-0	7.92 JB	0.0502	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	94	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163635
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS076 SDG#: DX020-03

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

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

LLI Sample # SW 6163635
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS076 SDG#: DX020-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 19:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403A	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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

LLI Sample # SW 6163636
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	6.3	0.50	0.50	1

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

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

LLI Sample # SW 6163636
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.581	J 0.0464	1.07	1
11031	12378-PeCDD	40321-76-4	5.45	BQ 0.0800	5.34	1
11031	123478-HxCDD	39227-28-6	14.0	B 0.0757	5.34	1
11031	123678-HxCDD	57653-85-7	27.7	0.0791	5.34	1
11031	123789-HxCDD	19408-74-3	30.6	B 0.0783	5.34	1
11031	1234678-HpCDD	35822-46-9	869	B 0.166	5.34	1
11031	OCDD	3268-87-9	7,170	EB 0.212	10.7	1
11031	2378-TCDF	51207-31-9	0.449	J 0.0918	1.07	1
11031	12378-PeCDF	57117-41-6	1.12	JB 0.0374	5.34	1
11031	23478-PeCDF	57117-31-4	1.66	JB 0.0359	5.34	1
11031	123478-HxCDF	70648-26-9	7.50	B 0.0759	5.34	1
11031	123678-HxCDF	57117-44-9	8.83	B 0.0687	5.34	1
11031	123789-HxCDF	72918-21-9	1.09	JB 0.0850	5.34	1
11031	234678-HxCDF	60851-34-5	12.8	B 0.0725	5.34	1
11031	1234678-HpCDF	67562-39-4	169	B 0.0580	5.34	1
11031	1234789-HpCDF	55673-89-7	13.6	B 0.0819	5.34	1
11031	OCDF	39001-02-0	362	B 0.0697	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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

LLI Sample # SW 6163636
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04BKG

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

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

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

LLI Sample # SW 6163636
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 20:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

LLI Sample # SW 6163637
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.3	0.50	0.50	1

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

LLI Sample # SW 6163637
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.1	0.0419	1.07	1
11031	12378-PeCDD	40321-76-4	106	B 0.0783	5.34	1
11031	123478-HxCDD	39227-28-6	122	B 0.0622	5.34	1
11031	123678-HxCDD	57653-85-7	126	0.0624	5.34	1
11031	123789-HxCDD	19408-74-3	134	B 0.0620	5.34	1
11031	1234678-HpCDD	35822-46-9	788	B 0.127	5.34	1
11031	OCDD	3268-87-9	5,720	EB 0.158	10.7	1
11031	2378-TCDF	51207-31-9	21.8	0.0864	1.07	1
11031	12378-PeCDF	57117-41-6	109	B 0.0332	5.34	1
11031	23478-PeCDF	57117-31-4	108	B 0.0331	5.34	1
11031	123478-HxCDF	70648-26-9	117	B 0.0874	5.34	1
11031	123678-HxCDF	57117-44-9	117	B 0.0732	5.34	1
11031	123789-HxCDF	72918-21-9	117	B 0.101	5.34	1
11031	234678-HxCDF	60851-34-5	123	B 0.0836	5.34	1
11031	1234678-HpCDF	67562-39-4	234	B 0.0550	5.34	1
11031	1234789-HpCDF	55673-89-7	126	B 0.0970	5.34	1
11031	OCDF	39001-02-0	513	B 0.0705	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	89	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163637
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04MS

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



Analysis Report

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

LLI Sample # SW 6163637
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 21:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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



Analysis Report

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

LLI Sample # SW 6163638
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.3	0.50	0.50	1

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

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

LLI Sample # SW 6163638
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.0	0.0502	1.07	1
11031	12378-PeCDD	40321-76-4	112	B 0.0935	5.34	1
11031	123478-HxCDD	39227-28-6	124	B 0.0721	5.34	1
11031	123678-HxCDD	57653-85-7	136	0.0723	5.34	1
11031	123789-HxCDD	19408-74-3	142	B 0.0732	5.34	1
11031	1234678-HpCDD	35822-46-9	1,100	B 0.207	5.34	1
11031	OCDD	3268-87-9	8,240	EB 0.263	10.7	1
11031	2378-TCDF	51207-31-9	20.9	0.0990	1.07	1
11031	12378-PeCDF	57117-41-6	109	B 0.0487	5.34	1
11031	23478-PeCDF	57117-31-4	108	B 0.0451	5.34	1
11031	123478-HxCDF	70648-26-9	121	B 0.108	5.34	1
11031	123678-HxCDF	57117-44-9	120	B 0.0961	5.34	1
11031	123789-HxCDF	72918-21-9	115	B 0.110	5.34	1
11031	234678-HxCDF	60851-34-5	129	B 0.102	5.34	1
11031	1234678-HpCDF	67562-39-4	305	B 0.0848	5.34	1
11031	1234789-HpCDF	55673-89-7	126	B 0.117	5.34	1
11031	OCDF	39001-02-0	669	B 0.0979	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	61	28 - 130
13C12-123789-HxCDD	62	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	59	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	67	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163638
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04MSD

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

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

LLI Sample # SW 6163638
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS071 SDG#: DX020-04MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 22:27	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

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

LLI Sample # SW 6163639
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS139 SDG#: DX020-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	12.2	0.50	0.50	1

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

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

LLI Sample # SW 6163639
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS139 SDG#: DX020-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0268 U	0.0268	1.14	1
11031	12378-PeCDD	40321-76-4	0.0836 U	0.0836	5.69	1
11031	123478-HxCDD	39227-28-6	0.492 JBQ	0.0391	5.69	1
11031	123678-HxCDD	57653-85-7	1.32 JQ	0.0391	5.69	1
11031	123789-HxCDD	19408-74-3	0.936 JB	0.0397	5.69	1
11031	1234678-HpCDD	35822-46-9	35.3 B	0.0632	5.69	1
11031	OCDD	3268-87-9	830 B	0.0745	11.4	1
11031	2378-TCDF	51207-31-9	0.800 JQ	0.107	1.14	1
11031	12378-PeCDF	57117-41-6	9.17 B	0.0386	5.69	1
11031	23478-PeCDF	57117-31-4	0.892 JB	0.0375	5.69	1
11031	123478-HxCDF	70648-26-9	1.16 JB	0.0543	5.69	1
11031	123678-HxCDF	57117-44-9	1.06 JB	0.0457	5.69	1
11031	123789-HxCDF	72918-21-9	0.862 JB	0.0665	5.69	1
11031	234678-HxCDF	60851-34-5	0.695 JB	0.0541	5.69	1
11031	1234678-HpCDF	67562-39-4	6.38 B	0.0530	5.69	1
11031	1234789-HpCDF	55673-89-7	0.794 JB	0.0940	5.69	1
11031	OCDF	39001-02-0	11.8 B	0.0416	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	93	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163639
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS139 SDG#: DX020-05

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

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

LLI Sample # SW 6163639
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS139 SDG#: DX020-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 23:23	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

LLI Sample # SW 6163640
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS083 SDG#: DX020-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	7.8	0.50	0.50	1

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

LLI Sample # SW 6163640
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS083 SDG#: DX020-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.506	U 0.506	1.08	1
11031	12378-PeCDD	40321-76-4	1.06	U 1.06	5.42	1
11031	123478-HxCDD	39227-28-6	3.49	JB 0.763	5.42	1
11031	123678-HxCDD	57653-85-7	10.9	Q 0.770	5.42	1
11031	123789-HxCDD	19408-74-3	8.13	B 0.824	5.42	1
11031	1234678-HpCDD	35822-46-9	307	B 0.907	5.42	1
11031	OCDD	3268-87-9	4,950	EB 1.10	10.8	1
11031	2378-TCDF	51207-31-9	26.8	3.35	1.08	1
11650	2378-TCDF-Conf	51207-31-9	31.2	0.292	1.08	1
11031	12378-PeCDF	57117-41-6	35.0	B 0.981	5.42	1
11031	23478-PeCDF	57117-31-4	274	B 0.979	5.42	1
11031	123478-HxCDF	70648-26-9	189	B 1.02	5.42	1
11031	123678-HxCDF	57117-44-9	86.7	B 0.877	5.42	1
11031	123789-HxCDF	72918-21-9	44.1	B 1.23	5.42	1
11031	234678-HxCDF	60851-34-5	47.3	B 1.00	5.42	1
11031	1234678-HpCDF	67562-39-4	139	B 0.486	5.42	1
11031	1234789-HpCDF	55673-89-7	87.1	B 0.702	5.42	1
11031	OCDF	39001-02-0	294	B 0.588	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-2378-TCDF-Conf	76	24 - 169
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

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

LLI Sample # SW 6163640
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS083 SDG#: DX020-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

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

LLI Sample # SW 6163640
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS083 SDG#: DX020-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/12/2011 19:18	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	10363001	02/05/2011 16:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

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

LLI Sample # SW 6163641
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS074 SDG#: DX020-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	8.2	0.50	0.50	1

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

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

LLI Sample # SW 6163641
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS074 SDG#: DX020-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.132 JQ	0.0253	1.09	1
11031	12378-PeCDD	40321-76-4	0.0593 U	0.0593	5.45	1
11031	123478-HxCDD	39227-28-6	0.904 JB	0.0477	5.45	1
11031	123678-HxCDD	57653-85-7	2.72 J	0.0479	5.45	1
11031	123789-HxCDD	19408-74-3	2.32 JB	0.0484	5.45	1
11031	1234678-HpCDD	35822-46-9	78.1 B	0.0900	5.45	1
11031	OCDD	3268-87-9	935 B	0.0931	10.9	1
11031	2378-TCDF	51207-31-9	0.333 JQ	0.0728	1.09	1
11031	12378-PeCDF	57117-41-6	0.898 JB	0.0352	5.45	1
11031	23478-PeCDF	57117-31-4	0.692 JB	0.0316	5.45	1
11031	123478-HxCDF	70648-26-9	0.791 JBQ	0.0453	5.45	1
11031	123678-HxCDF	57117-44-9	0.806 JB	0.0411	5.45	1
11031	123789-HxCDF	72918-21-9	0.465 JBQ	0.0502	5.45	1
11031	234678-HxCDF	60851-34-5	0.994 JB	0.0438	5.45	1
11031	1234678-HpCDF	67562-39-4	12.2 B	0.0590	5.45	1
11031	1234789-HpCDF	55673-89-7	1.25 JBQ	0.0777	5.45	1
11031	OCDF	39001-02-0	28.1 B	0.0778	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163641
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS074 SDG#: DX020-07

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



Analysis Report

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

LLI Sample # SW 6163641
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS074 SDG#: DX020-07

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 04:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

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

LLI Sample # SW 6163642
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS301 SDG#: DX020-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	8.8	0.50	0.50	1

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

LLI Sample # SW 6163642
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS301 SDG#: DX020-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.205	J	0.0345	1
11031	12378-PeCDD	40321-76-4	0.0763	U	0.0763	1
11031	123478-HxCDD	39227-28-6	2.77	JB	0.0402	1
11031	123678-HxCDD	57653-85-7	8.03		0.0401	1
11031	123789-HxCDD	19408-74-3	5.87	B	0.0396	1
11031	1234678-HpCDD	35822-46-9	233	B	0.111	1
11031	OCDD	3268-87-9	2,320	B	0.121	1
11031	2378-TCDF	51207-31-9	1.91		0.134	1
11650	2378-TCDF-Conf	51207-31-9	2.30		0.0768	1
11031	12378-PeCDF	57117-41-6	3.84	JB	0.0432	1
11031	123478-PeCDF	57117-31-4	3.89	JB	0.0390	1
11031	123478-HxCDF	70648-26-9	3.63	JB	0.0633	1
11031	123678-HxCDF	57117-44-9	3.15	JB	0.0560	1
11031	123789-HxCDF	72918-21-9	1.07	JBQ	0.0643	1
11031	1234678-HxCDF	60851-34-5	2.78	JB	0.0596	1
11031	1234678-HpCDF	67562-39-4	36.9	B	0.0575	1
11031	1234789-HpCDF	55673-89-7	3.98	JB	0.0775	1
11031	OCDF	39001-02-0	95.2	B	0.0473	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-2378-TCDF-Conf	61	24 - 169
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163642
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS301 SDG#: DX020-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

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

LLI Sample # SW 6163642
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS301 SDG#: DX020-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 05:16	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	10363001	02/24/2011 21:55	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

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

LLI Sample # SW 6163643
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS073 SDG#: DX020-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	4.8	0.50	0.50	1

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

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

LLI Sample # SW 6163643
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS073 SDG#: DX020-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0983 JQ	0.0229	1.05	1
11031	12378-PeCDD	40321-76-4	0.0593 U	0.0593	5.25	1
11031	123478-HxCDD	39227-28-6	0.707 JB	0.0391	5.25	1
11031	123678-HxCDD	57653-85-7	2.21 J	0.0393	5.25	1
11031	123789-HxCDD	19408-74-3	2.00 JB	0.0419	5.25	1
11031	1234678-HpCDD	35822-46-9	58.9 B	0.0622	5.25	1
11031	OCDD	3268-87-9	630 B	0.0836	10.5	1
11031	2378-TCDF	51207-31-9	0.676 JQ	0.0606	1.05	1
11031	12378-PeCDF	57117-41-6	1.36 JB	0.0320	5.25	1
11031	23478-PeCDF	57117-31-4	0.878 JB	0.0278	5.25	1
11031	123478-HxCDF	70648-26-9	1.56 JBQ	0.0394	5.25	1
11031	123678-HxCDF	57117-44-9	1.00 JB	0.0364	5.25	1
11031	123789-HxCDF	72918-21-9	0.708 JBQ	0.0442	5.25	1
11031	234678-HxCDF	60851-34-5	0.833 JB	0.0380	5.25	1
11031	1234678-HpCDF	67562-39-4	8.35 B	0.0509	5.25	1
11031	1234789-HpCDF	55673-89-7	0.908 JB	0.0637	5.25	1
11031	OCDF	39001-02-0	18.6 B	0.0361	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	95	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	93	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163643
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS073 SDG#: DX020-09

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

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

LLI Sample # SW 6163643
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS073 SDG#: DX020-09

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 06:13	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

LLI Sample # SW 6163644
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS072 SDG#: DX020-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.3	0.50	0.50	1

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

LLI Sample # SW 6163644
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS072 SDG#: DX020-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0243	U	0.0243	1
11031	12378-PeCDD	40321-76-4	0.860	JB	0.0479	1
11031	123478-HxCDD	39227-28-6	2.03	JB	0.0301	1
11031	123678-HxCDD	57653-85-7	5.90		0.0318	1
11031	123789-HxCDD	19408-74-3	4.17	JB	0.0328	1
11031	1234678-HpCDD	35822-46-9	182	B	0.0794	1
11031	OCDD	3268-87-9	1,880	B	0.101	1
11031	2378-TCDF	51207-31-9	0.731	J	0.0758	1
11031	12378-PeCDF	57117-41-6	1.51	JB	0.0322	1
11031	23478-PeCDF	57117-31-4	1.63	JBQ	0.0308	1
11031	123478-HxCDF	70648-26-9	2.36	JB	0.0401	1
11031	123678-HxCDF	57117-44-9	1.63	JB	0.0359	1
11031	123789-HxCDF	72918-21-9	0.786	JB	0.0461	1
11031	234678-HxCDF	60851-34-5	1.95	JB	0.0393	1
11031	1234678-HpCDF	67562-39-4	30.1	B	0.0389	1
11031	1234789-HpCDF	55673-89-7	2.95	JB	0.0561	1
11031	OCDF	39001-02-0	79.9	B	0.0373	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	62	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163644
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS072 SDG#: DX020-10

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

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

LLI Sample # SW 6163644
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS072 SDG#: DX020-10

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 07:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

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

LLI Sample # SW 6163645
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DDP04 SDG#: DX020-11FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.9	0.50	0.50	1

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

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

LLI Sample # SW 6163645
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DDP04 SDG#: DX020-11FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.592	J 0.0427	1.06	1
11031	12378-PeCDD	40321-76-4	6.69	B 0.0868	5.31	1
11031	123478-HxCDD	39227-28-6	18.3	B 0.0637	5.31	1
11031	123678-HxCDD	57653-85-7	35.2	0.0637	5.31	1
11031	123789-HxCDD	19408-74-3	38.7	B 0.0648	5.31	1
11031	1234678-HpCDD	35822-46-9	1,140	B 0.235	5.31	1
11031	OCDD	3268-87-9	8,980	EB 0.261	10.6	1
11031	2378-TCDF	51207-31-9	0.564	J 0.0905	1.06	1
11031	12378-PeCDF	57117-41-6	1.25	JB 0.0429	5.31	1
11031	23478-PeCDF	57117-31-4	1.95	JB 0.0439	5.31	1
11031	123478-HxCDF	70648-26-9	9.88	B 0.0846	5.31	1
11031	123678-HxCDF	57117-44-9	11.0	B 0.0767	5.31	1
11031	123789-HxCDF	72918-21-9	1.42	JB 0.0953	5.31	1
11031	234678-HxCDF	60851-34-5	16.1	B 0.0744	5.31	1
11031	1234678-HpCDF	67562-39-4	223	B 0.103	5.31	1
11031	1234789-HpCDF	55673-89-7	17.8	B 0.138	5.31	1
11031	OCDF	39001-02-0	471	B 0.0996	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

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

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

LLI Sample # SW 6163645
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DDP04 SDG#: DX020-11FD

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

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

LLI Sample # SW 6163645
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DDP04 SDG#: DX020-11FD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 08:06	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-029-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163646
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS029 SDG#: DX020-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.7	0.50	0.50	1

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163646
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS029 SDG#: DX020-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.187	J	0.0386	1
11031	12378-PeCDD	40321-76-4	1.15	JBQ	0.101	1
11031	123478-HxCDD	39227-28-6	2.99	JB	0.0579	1
11031	123678-HxCDD	57653-85-7	6.88		0.0580	1
11031	123789-HxCDD	19408-74-3	4.22	JB	0.0589	1
11031	1234678-HpCDD	35822-46-9	182	B	0.127	1
11031	OCDD	3268-87-9	1,970	B	0.142	1
11031	2378-TCDF	51207-31-9	1.03	J	0.131	1
11031	12378-PeCDF	57117-41-6	10.6	B	0.0559	1
11031	23478-PeCDF	57117-31-4	4.53	JB	0.0504	1
11031	123478-HxCDF	70648-26-9	2.00	JB	0.0524	1
11031	123678-HxCDF	57117-44-9	2.44	JB	0.0489	1
11031	123789-HxCDF	72918-21-9	0.718	JB	0.0576	1
11031	234678-HxCDF	60851-34-5	3.27	JB	0.0507	1
11031	1234678-HpCDF	67562-39-4	29.4	B	0.0660	1
11031	1234789-HpCDF	55673-89-7	1.99	JB	0.0877	1
11031	OCDF	39001-02-0	106	B	0.0526	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	65	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163646
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS029 SDG#: DX020-12

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163646
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS029 SDG#: DX020-12

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 09:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-031-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163647
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS031 SDG#: DX020-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10	0.50	0.50	1

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163647
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS031 SDG#: DX020-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0302	JQ	0.0237	1
11031	12378-PeCDD	40321-76-4	0.385	JB	0.0470	1
11031	123478-HxCDD	39227-28-6	0.578	JB	0.0416	1
11031	123678-HxCDD	57653-85-7	3.05	J	0.0390	1
11031	123789-HxCDD	19408-74-3	1.18	JB	0.0388	1
11031	1234678-HpCDD	35822-46-9	103	B	0.0878	1
11031	OCDD	3268-87-9	1,310	B	0.103	1
11031	2378-TCDF	51207-31-9	0.331	JQ	0.0571	1
11031	12378-PeCDF	57117-41-6	1.21	JB	0.0304	1
11031	23478-PeCDF	57117-31-4	0.812	JB	0.0292	1
11031	123478-HxCDF	70648-26-9	0.593	JB	0.0306	1
11031	123678-HxCDF	57117-44-9	0.541	JB	0.0277	1
11031	123789-HxCDF	72918-21-9	0.204	JBQ	0.0354	1
11031	234678-HxCDF	60851-34-5	0.768	JB	0.0317	1
11031	1234678-HpCDF	67562-39-4	22.8	B	0.0481	1
11031	1234789-HpCDF	55673-89-7	1.07	JB	0.0770	1
11031	OCDF	39001-02-0	99.4	B	0.0466	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	50	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163647
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20 by BH

CDM Federal Programs Corp.
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Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS031 SDG#: DX020-13

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163647
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS031 SDG#: DX020-13

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 09:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-030-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163648
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS030 SDG#: DX020-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.3	0.50	0.50	1

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163648
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS030 SDG#: DX020-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.208 U	0.208	1.19	1
11031	12378-PeCDD	40321-76-4	0.254 U	0.254	5.97	1
11031	123478-HxCDD	39227-28-6	0.368 JBQ	0.274	5.97	1
11031	123678-HxCDD	57653-85-7	1.12 J	0.286	5.97	1
11031	123789-HxCDD	19408-74-3	0.836 JBQ	0.284	5.97	1
11031	1234678-HpCDD	35822-46-9	40.6 B	0.566	5.97	1
11031	OCDD	3268-87-9	381 B	0.593	11.9	1
11031	2378-TCDF	51207-31-9	0.318 U	0.318	1.19	1
11031	12378-PeCDF	57117-41-6	1.71 JB	0.170	5.97	1
11031	23478-PeCDF	57117-31-4	0.844 JB	0.172	5.97	1
11031	123478-HxCDF	70648-26-9	0.523 JBQ	0.234	5.97	1
11031	123678-HxCDF	57117-44-9	0.326 JBQ	0.184	5.97	1
11031	123789-HxCDF	72918-21-9	0.287 U	0.287	5.97	1
11031	234678-HxCDF	60851-34-5	0.674 JB	0.223	5.97	1
11031	1234678-HpCDF	67562-39-4	7.35 BQ	0.297	5.97	1
11031	1234789-HpCDF	55673-89-7	0.518 U	0.518	5.97	1
11031	OCDF	39001-02-0	21.5 B	0.446	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	53	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	46	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163648
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS030 SDG#: DX020-14

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163648
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS030 SDG#: DX020-14

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/12/2011 20:15	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-040-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163649
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS040 SDG#: DX020-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	8.3	0.50	0.50	1

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163649
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS040 SDG#: DX020-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.151 U	0.151	1.09	1
11031	12378-PeCDD	40321-76-4	0.316 JBQ	0.149	5.45	1
11031	123478-HxCDD	39227-28-6	0.283 JBQ	0.176	5.45	1
11031	123678-HxCDD	57653-85-7	1.09 JQ	0.168	5.45	1
11031	123789-HxCDD	19408-74-3	0.493 JBQ	0.182	5.45	1
11031	1234678-HpCDD	35822-46-9	25.3 B	0.335	5.45	1
11031	OCDD	3268-87-9	312 B	0.353	10.9	1
11031	2378-TCDF	51207-31-9	0.175 U	0.175	1.09	1
11031	12378-PeCDF	57117-41-6	0.323 JBQ	0.0916	5.45	1
11031	23478-PeCDF	57117-31-4	0.336 JBQ	0.0880	5.45	1
11031	123478-HxCDF	70648-26-9	0.223 JBQ	0.154	5.45	1
11031	123678-HxCDF	57117-44-9	0.133 U	0.133	5.45	1
11031	123789-HxCDF	72918-21-9	0.163 U	0.163	5.45	1
11031	234678-HxCDF	60851-34-5	0.244 JBQ	0.147	5.45	1
11031	1234678-HpCDF	67562-39-4	4.46 JBQ	0.210	5.45	1
11031	1234789-HpCDF	55673-89-7	0.308 U	0.308	5.45	1
11031	OCDF	39001-02-0	15.5 B	0.207	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163649
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19 by BH

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14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS040 SDG#: DX020-15

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163649
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS040 SDG#: DX020-15

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/12/2011 21:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163650
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS086 SDG#: DX020-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163650
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS086 SDG#: DX020-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0913 U	0.0913	1.06	1
11031	12378-PeCDD	40321-76-4	0.110 JBQ	0.0971	5.31	1
11031	123478-HxCDD	39227-28-6	0.109 U	0.109	5.31	1
11031	123678-HxCDD	57653-85-7	0.219 JQ	0.110	5.31	1
11031	123789-HxCDD	19408-74-3	0.260 JBQ	0.118	5.31	1
11031	1234678-HpCDD	35822-46-9	8.11 BQ	0.286	5.31	1
11031	OCDD	3268-87-9	84.9 B	0.160	10.6	1
11031	2378-TCDF	51207-31-9	0.111 U	0.111	1.06	1
11031	12378-PeCDF	57117-41-6	0.0998 JBQ	0.0562	5.31	1
11031	23478-PeCDF	57117-31-4	0.0780 JB	0.0525	5.31	1
11031	123478-HxCDF	70648-26-9	0.0851 U	0.0851	5.31	1
11031	123678-HxCDF	57117-44-9	0.0913 JBQ	0.0763	5.31	1
11031	123789-HxCDF	72918-21-9	0.0982 U	0.0982	5.31	1
11031	234678-HxCDF	60851-34-5	0.152 JBQ	0.0834	5.31	1
11031	1234678-HpCDF	67562-39-4	1.22 JB	0.141	5.31	1
11031	1234789-HpCDF	55673-89-7	0.212 U	0.212	5.31	1
11031	OCDF	39001-02-0	3.30 JB	0.177	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	86	25 - 164
13C12-12378-PeCDD	109	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	100	24 - 185
13C12-23478-PeCDF	96	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	100	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163650
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS086 SDG#: DX020-16

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163650
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS086 SDG#: DX020-16

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/12/2011 22:08	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163651
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS092 SDG#: DX020-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163651
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS092 SDG#: DX020-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.114 U	0.114	1.13	1
11031	12378-PeCDD	40321-76-4	0.0941 U	0.0941	5.63	1
11031	123478-HxCDD	39227-28-6	0.102 U	0.102	5.63	1
11031	123678-HxCDD	57653-85-7	0.106 U	0.106	5.63	1
11031	123789-HxCDD	19408-74-3	0.170 JBQ	0.100	5.63	1
11031	1234678-HpCDD	35822-46-9	3.82 JB	0.192	5.63	1
11031	OCDD	3268-87-9	32.1 B	0.184	11.3	1
11031	2378-TCDF	51207-31-9	0.117 U	0.117	1.13	1
11031	12378-PeCDF	57117-41-6	0.0672 U	0.0672	5.63	1
11031	23478-PeCDF	57117-31-4	0.0661 U	0.0661	5.63	1
11031	123478-HxCDF	70648-26-9	0.0821 U	0.0821	5.63	1
11031	123678-HxCDF	57117-44-9	0.0722 JBQ	0.0686	5.63	1
11031	123789-HxCDF	72918-21-9	0.0902 U	0.0902	5.63	1
11031	234678-HxCDF	60851-34-5	0.0894 JBQ	0.0796	5.63	1
11031	1234678-HpCDF	67562-39-4	0.724 JBQ	0.0910	5.63	1
11031	1234789-HpCDF	55673-89-7	0.139 U	0.139	5.63	1
11031	OCDF	39001-02-0	1.54 JB	0.173	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	52	17 - 157
13C12-1278-TCDD (CRS)	65	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163651
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS092 SDG#: DX020-17

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163651
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS092 SDG#: DX020-17

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/12/2011 23:05	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

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Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163652
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS103 SDG#: DX020-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163652
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS103 SDG#: DX020-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.127 U	0.127	1.13	1
11031	12378-PeCDD	40321-76-4	0.115 U	0.115	5.63	1
11031	123478-HxCDD	39227-28-6	0.0902 U	0.0902	5.63	1
11031	123678-HxCDD	57653-85-7	0.145 JQ	0.0891	5.63	1
11031	123789-HxCDD	19408-74-3	0.221 JBQ	0.0909	5.63	1
11031	1234678-HpCDD	35822-46-9	1.86 JBQ	0.168	5.63	1
11031	OCDD	3268-87-9	14.4 B	0.162	11.3	1
11031	2378-TCDF	51207-31-9	0.108 U	0.108	1.13	1
11031	12378-PeCDF	57117-41-6	0.0671 U	0.0671	5.63	1
11031	23478-PeCDF	57117-31-4	0.0676 U	0.0676	5.63	1
11031	123478-HxCDF	70648-26-9	0.0711 U	0.0711	5.63	1
11031	123678-HxCDF	57117-44-9	0.0559 U	0.0559	5.63	1
11031	123789-HxCDF	72918-21-9	0.142 JBQ	0.0786	5.63	1
11031	234678-HxCDF	60851-34-5	0.0658 U	0.0658	5.63	1
11031	1234678-HpCDF	67562-39-4	0.363 JBQ	0.0630	5.63	1
11031	1234789-HpCDF	55673-89-7	0.109 U	0.109	5.63	1
11031	OCDF	39001-02-0	0.798 JB	0.163	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163652
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS103 SDG#: DX020-18

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



Analysis Report

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Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163652
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS103 SDG#: DX020-18

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/13/2011 00:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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



Analysis Report

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Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163653
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS089 SDG#: DX020-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163653
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS089 SDG#: DX020-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0969 U	0.0969	1.07	1
11031	12378-PeCDD	40321-76-4	0.227 U	0.227	5.36	1
11031	123478-HxCDD	39227-28-6	0.383 JB	0.344	5.36	1
11031	123678-HxCDD	57653-85-7	11.9	0.353	5.36	1
11031	123789-HxCDD	19408-74-3	1.04 JBQ	0.350	5.36	1
11031	1234678-HpCDD	35822-46-9	675 B	0.747	5.36	1
11031	OCDD	3268-87-9	10,500 EB	1.47	10.7	1
11031	2378-TCDF	51207-31-9	0.134 U	0.134	1.07	1
11031	12378-PeCDF	57117-41-6	0.132 JBQ	0.0939	5.36	1
11031	23478-PeCDF	57117-31-4	0.285 JBQ	0.0864	5.36	1
11031	123478-HxCDF	70648-26-9	2.30 JBQ	0.298	5.36	1
11031	123678-HxCDF	57117-44-9	0.755 JB	0.269	5.36	1
11031	123789-HxCDF	72918-21-9	0.316 U	0.316	5.36	1
11031	234678-HxCDF	60851-34-5	0.848 JBQ	0.291	5.36	1
11031	1234678-HpCDF	67562-39-4	58.0 B	0.348	5.36	1
11031	1234789-HpCDF	55673-89-7	5.67 B	0.448	5.36	1
11031	OCDF	39001-02-0	376 B	0.257	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	93	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	78	29 - 147

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163653
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS089 SDG#: DX020-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-1234678-HpCDF	80	28 - 143			
	13C12-1234789-HpCDF	72	26 - 138			
	13C12-OCDF	69	17 - 157			
	13C12-1278-TCDD (CRS)	86	35 - 197			

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163653
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS089 SDG#: DX020-19

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/13/2011 00:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163654
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS236 SDG#: DX020-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163654
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS236 SDG#: DX020-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.334 U	0.334	1.06	1
11031	12378-PeCDD	40321-76-4	0.359 U	0.359	5.31	1
11031	123478-HxCDD	39227-28-6	0.524 JBQ	0.415	5.31	1
11031	123678-HxCDD	57653-85-7	1.21 JQ	0.446	5.31	1
11031	123789-HxCDD	19408-74-3	0.917 JBQ	0.442	5.31	1
11031	1234678-HpCDD	35822-46-9	28.2 B	1.20	5.31	1
11031	OCDD	3268-87-9	316 B	0.938	10.6	1
11031	2378-TCDF	51207-31-9	0.425 U	0.425	1.06	1
11031	12378-PeCDF	57117-41-6	0.457 JBQ	0.262	5.31	1
11031	23478-PeCDF	57117-31-4	1.82 JBQ	0.238	5.31	1
11031	123478-HxCDF	70648-26-9	1.14 JBQ	0.371	5.31	1
11031	123678-HxCDF	57117-44-9	0.810 JB	0.358	5.31	1
11031	123789-HxCDF	72918-21-9	0.595 JBQ	0.383	5.31	1
11031	234678-HxCDF	60851-34-5	0.695 JBQ	0.338	5.31	1
11031	1234678-HpCDF	67562-39-4	4.74 JBQ	0.500	5.31	1
11031	1234789-HpCDF	55673-89-7	0.767 JBQ	0.606	5.31	1
11031	OCDF	39001-02-0	9.75 JB	0.561	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	65	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163654
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS236 SDG#: DX020-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163654
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 03/11/2011 14:47

DS236 SDG#: DX020-20*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/13/2011 01:55	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/11/11 at 02:47 PM

Group Number: 1225224

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 10349162403A 28a Moisture Content by 160.3	Sample number(s): 6163633-6163635				100		80-120		
Batch number: 10349162403B 28a Moisture Content by 160.3	Sample number(s): 6163636-6163654				100		80-120		

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 10363001	Sample number(s): 6163633-6163654								
2378-TCDD	0.0143 U	0.0143	1.00	ng/kg	93		67-158		
12378-PeCDD	0.0342 J	0.0187	5.00	ng/kg	95		70-142		
123478-HxCDD	0.0175 J	0.0162	5.00	ng/kg	100		70-164		
123678-HxCDD	0.0168 U	0.0168	5.00	ng/kg	99		76-134		
123789-HxCDD	0.0253 J	0.0169	5.00	ng/kg	100		64-162		
1234678-HpCDD	0.120 J	0.0195	5.00	ng/kg	98		70-140		
OCDD	0.267 J	0.0250	10.0	ng/kg	100		78-144		
2378-TCDF	0.0181 U	0.0181	1.00	ng/kg	103		75-158		
2378-TCDF-Conf	0.0398 U	0.0398	1.00	ng/kg					
12378-PeCDF	0.0395 J	0.0115	5.00	ng/kg	100		80-134		
23478-PeCDF	0.0407 J	0.0115	5.00	ng/kg	100		68-160		
123478-HxCDF	0.0536 J	0.0135	5.00	ng/kg	103		72-134		
123678-HxCDF	0.0265 J	0.0114	5.00	ng/kg	103		84-130		
123789-HxCDF	0.0565 J	0.0157	5.00	ng/kg	105		78-130		
234678-HxCDF	0.0592 J	0.0130	5.00	ng/kg	105		70-156		
1234678-HpCDF	0.142 J	0.0102	5.00	ng/kg	101		82-122		
1234789-HpCDF	0.0456 J	0.0197	5.00	ng/kg	107		78-138		
OCDF	0.165 J	0.0244	10.0	ng/kg	105		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 10349162403A 28a Moisture Content by 160.3	Sample number(s): 6163633-6163635					BKG: P163597 8.6	8.6	0	20
Batch number: 10349162403B 28a Moisture Content by 160.3	Sample number(s): 6163636-6163654					BKG: P163599 6.3	6.5	2	20
Batch number: 10363001	Sample number(s): 6163633-6163654					UNSPK: 6163636			

*- Outside of specification

**This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/11/11 at 02:47 PM

Group Number: 1225224

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDD	92	91	67-158	1	25				
12378-PeCDD	94	100	70-142	6	25				
123478-HxCDD	101	103	70-164	2	25				
123678-HxCDD	92	101	76-134	8	25				
123789-HxCDD	96	104	64-162	6	25				
1234678-HpCDD	-76 (2)	216 (2)	70-140	33*	25				
OCDD	-683 (2)	497 (2)	78-144	36*	25				
2378-TCDF	100	96	75-158	4	25				
12378-PeCDF	101	101	80-134	0	25				
23478-PeCDF	100	100	68-160	0	25				
123478-HxCDF	103	107	72-134	4	25				
123678-HxCDF	102	105	84-130	3	25				
123789-HxCDF	108	107	78-130	2	25				
234678-HxCDF	103	108	70-156	4	25				
1234678-HpCDF	61*	128*	82-122	26*	25				
1234789-HpCDF	105	106	78-138	1	25				
OCDF	71	144	63-170	26*	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 10363001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6163633	70	85	80	66	72	71
6163634	65	79	68	72	71	63
6163635	63	83	71	73	69	63
6163636	64	79	69	72	70	67
6163637	71	80	67	75	67	62
6163638	58	73	60	61	59	59
6163639	63	83	65	74	65	59
6163640	70	71	63	69	65	59
6163641	71	84	70	73	70	66
6163642	67	80	71	78	74	75
6163643	78	93	76	78	77	73
6163644	67	79	74	77	71	68
6163645	71	74	74	78	81	71
6163646	79	85	76	77	78	77
6163647	74	81	69	74	66	67
6163648	68	71	58	70	61	53
6163649	70	79	66	75	70	69
6163650	86	96	79	87	82	78
6163651	57	68	59	66	61	59
6163652	70	79	65	78	68	64
6163653	78	87	76	79	75	78
6163654	71	83	72	73	75	77

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/11/11 at 02:47 PM

Group Number: 1225224

Surrogate Quality Control

Blank	60	67	56	64	56	54
MS	71	80	67	75	67	62
MSD	58	73	60	61	59	59
OPR	56	59	49	57	51	46
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6163633	64	63	43	80	88	84
6163634	81	63	51	71	90	76
6163635	82	63	55	77	94	76
6163636	86	70	60	76	86	79
6163637	92	62	55	75	89	77
6163638	70	57	51	67	75	64
6163639	90	59	55	80	93	76
6163640	77	60	55	82	79	71
6163641	82	68	60	83	82	72
6163642	79	66	61	73	81	77
6163643	79	74	72	87	95	79
6163644	85	67	62	80	83	78
6163645	79	66	57	81	80	83
6163646	80	71	65	82	83	79
6163647	81	57	50	79	85	71
6163648	75	51	46	81	82	68
6163649	81	64	57	87	88	76
6163650	94	74	67	100	109	88
6163651	76	59	52	65	77	69
6163652	88	59	53	79	88	78
6163653	80	72	69	86	93	82
6163654	75	70	65	82	87	77
Blank	79	50	46	70	73	69
MS	92	62	55	75	89	77
MSD	70	57	51	67	75	64
OPR	77	47	44	67	71	63
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6163633	64	70	66	45	72	80
6163634	72	72	82	63	61	83
6163635	71	71	75	64	58	79
6163636	74	74	84	72	63	81
6163637	75	74	79	70	61	82
6163638	61	62	66	58	56	73
6163639	71	74	76	70	59	86
6163640	75	70	73	71	65	76
6163641	71	71	78	70	65	81
6163642	73	77	72	68	69	81
6163643	75	75	79	73	76	91
6163644	72	71	76	69	70	81
6163645	80	80	80	70	71	81
6163646	74	76	76	71	73	82
6163647	70	73	73	63	71	83
6163648	66	69	71	63	62	78

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/11/11 at 02:47 PM

Group Number: 1225224

Surrogate Quality Control

6163649	79	77	79	69	69	85
6163650	87	86	90	81	82	100
6163651	66	69	71	62	54	72
6163652	78	78	78	73	66	86
6163653	78	80	83	77	77	86
6163654	76	78	80	72	77	84
Blank	63	62	68	60	48	70
MS	75	74	79	70	61	82
MSD	61	62	66	58	56	73
OPR	58	58	66	61	45	64

Limits:	28-130	28-130	23-140	17-157	24-169	24-185

13C12-2378-TCDF-Conf

6163633
6163634
6163635
6163636
6163637
6163638
6163639
6163640 76
6163641
6163642 61
6163643
6163644
6163645
6163646
6163647
6163648
6163649
6163650
6163651
6163652
6163653
6163654
Blank 56
MS
MSD
OPR

Limits: 24-169

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

CHAIN OF CUSTODY RECORD

Received by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Laboratory
<i>[Signature]</i>	12/13/10 1630	<i>[Signature]</i>	12/14/10	Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	APRN No.		
		000732992	1005	6 copiers

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

January 25, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/14/2010

Group Number: 1225274

SDG: DE037

PO Number: 1203-004-007-AL

Release Number: Tracking #11667

State of Sample Origin: CA

Client Sample DescriptionSL-006-SA5C-SB-9.0-10.0 Soil
DUP13-SA5C-QC-121310 Soil
SL-006-SA5C-SB-4.0-5.0 Soil
SL-006-SA5C-SB-4.0-5.0MS Soil
SL-006-SA5C-SB-4.0-5.0MSD Soil
SL-006-SA5C-SB-4.0-5.0DUP Soil
EB-15-SA5B-121310 Water
SL-007-SA5C-SB-4.0-5.0 Soil
SL-007-SA5C-SB-9.0-10.0 Soil
SL-075-SA5B-SS-0.0-0.5 Soil
SL-077-SA5B-SS-0.0-0.5 Soil
SL-085-SA5B-SS-0.0-0.5 Soil
SL-087-SA5B-SS-0.0-0.5 Soil
SL-095-SA5B-SS-0.0-0.5 Soil
SL-091-SA5B-SS-0.0-0.5 Soil
SL-003-SA5C-SB-4.0-5.0 Soil
SL-001-SA5C-SB-4.0-5.0 Soil
SL-001-SA5C-SB-9.0-10.0 Soil
SED-032-SIV-SD-0.0-0.5 Soil
SED-033-SIV-SD-0.0-0.5 SoilLancaster Labs (LLI) #6163869
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The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Robin C. Runkle".

Robin C. Runkle
Senior Specialist

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.7 J	7.3	8.8		1.01
06192	Benzene	71-43-2	0.11 U	0.11	4.4		1.01
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.4		1.01
06192	Bromochloromethane	74-97-5	0.36 U	0.36	4.4		1.01
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.4		1.01
06192	Bromoform	75-25-2	0.44 U	0.44	4.4		1.01
06192	Bromomethane	74-83-9	0.27 U	0.27	4.4		1.01
06192	2-Butanone	78-93-3	1.3 U	1.3	8.8		1.01
06192	n-Butylbenzene	104-51-8	0.13 U	0.13	4.4		1.01
06192	sec-Butylbenzene	135-98-8	0.07 U	0.07	4.4		1.01
06192	tert-Butylbenzene	98-06-6	0.18 U	0.18	4.4		1.01
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.4		1.01
06192	Chlorobenzene	108-90-7	0.12 U	0.12	4.4		1.01
06192	Chloroethane	75-00-3	0.14 U	0.14	4.4		1.01
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.33 U	0.33	4.4		1.01
06192	Chloroform	67-66-3	0.13 U	0.13	4.4		1.01
06192	Chloromethane	74-87-3	0.36 U	0.36	4.4		1.01
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.4		1.01
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.4		1.01
06192	Chlorotrifluoroethene	79-38-9	0.55 U	0.55	5.5		1.01
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.77 U	0.77	4.4		1.01
06192	Dibromochloromethane	124-48-1	0.22 U	0.22	4.4		1.01
06192	1,2-Dibromoethane	106-93-4	0.19 U	0.19	4.4		1.01
06192	Dibromomethane	74-95-3	0.26 U	0.26	4.4		1.01
06192	1,2-Dichlorobenzene	95-50-1	0.1 U	0.1	4.4		1.01
06192	1,3-Dichlorobenzene	541-73-1	0.13 U	0.13	4.4		1.01
06192	1,4-Dichlorobenzene	106-46-7	0.18 U	0.18	4.4		1.01
06192	Dichlorodifluoromethane	75-71-8	0.13 U	0.13	4.4		1.01
06192	1,1-Dichloroethane	75-34-3	0.11 U	0.11	4.4		1.01
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.4		1.01
06192	1,1-Dichloroethene	75-35-4	0.43 U	0.43	4.4		1.01
06192	cis-1,2-Dichloroethene	156-59-2	0.21 U	0.21	4.4		1.01
06192	trans-1,2-Dichloroethene	156-60-5	0.13 U	0.13	4.4		1.01
06192	1,2-Dichloropropane	78-87-5	0.19 U	0.19	4.4		1.01
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.4		1.01
06192	2,2-Dichloropropane	594-20-7	0.19 U	0.19	4.4		1.01
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.4		1.01
06192	cis-1,3-Dichloropropene	10061-01-5	0.18 U	0.18	4.4		1.01
06192	trans-1,3-Dichloropropene	10061-02-6	0.19 U	0.19	4.4		1.01
06192	Ethylbenzene	100-41-4	0.07 U	0.07	4.4		1.01
06192	Freon 113	76-13-1	0.12 U	0.12	4.4		1.01
06192	Freon 133a	75-88-7	0.55 U	0.55	5.5		1.01
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.4		1.01
06192	2-Hexanone	591-78-6	1.8 U	1.8	8.8		1.01
06192	Isopropylbenzene	98-82-8	0.07 U	0.07	4.4		1.01
06192	p-Isopropyltoluene	99-87-6	0.12 U	0.12	4.4		1.01
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.23 U	0.23	4.4		1.01
06192	4-Methyl-2-pentanone	108-10-1	0.43 U	0.43	8.8		1.01
06192	Methylene Chloride	75-09-2	1.1 J	0.26	4.4		1.01
06192	n-Propylbenzene	103-65-1	0.08 U	0.08	4.4		1.01

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.11 U	0.11	4.4		1.01
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12 U	0.12	4.4		1.01
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.25 U	0.25	4.4		1.01
06192	Tetrachloroethene	127-18-4	0.22 U	0.22	4.4		1.01
06192	Toluene	108-88-3	0.09 U	0.09	4.4		1.01
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.4		1.01
06192	1,2,4-Trichlorobenzene	120-82-1	0.20 U	0.20	4.4		1.01
06192	1,1,1-Trichloroethane	71-55-6	0.22 U	0.22	4.4		1.01
06192	1,1,2-Trichloroethane	79-00-5	0.30 U	0.30	4.4		1.01
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.4		1.01
06192	Trichlorofluoromethane	75-69-4	0.32 U	0.32	4.4		1.01
06192	1,2,3-Trichloropropane	96-18-4	0.36 U	0.36	4.4		1.01
06192	1,2,4-Trimethylbenzene	95-63-6	0.44 U	0.44	4.4		1.01
06192	1,3,5-Trimethylbenzene	108-67-8	0.11 U	0.11	4.4		1.01
06192	Vinyl Chloride	75-01-4	0.22 U	0.22	4.4		1.01
06192	m+p-Xylene	179601-23-1	0.19 U	0.19	4.4		1.01
06192	o-Xylene	95-47-6	0.19 U	0.19	4.4		1.01
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.5 U	5.5	17		25.41
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	78.4	36.3	72.6		2
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	360		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U 0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U 0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U 0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	20		1
10138	Chrysene	218-01-9	0.36	U 0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U 6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U 6.5	20		1
10138	Fluoranthene	206-44-0	0.73	U 0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U 0.73	1.8		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20		1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.0		22.98
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	82 U	82	160	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	54 U	54	160	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110 U	110	330	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110 U	110	330	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	54 U	54	160	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	54 U	54	160	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	54 U	54	160	1000000 0	1
10132	HMX	2691-41-0	140 U	140	410	1000000 0	1
10132	Nitrobenzene	98-95-3	54 U	54	160	1000000 0	1
10132	Nitroglycerin	55-63-0	1,100 U	1,100	3,300	1000000 0	1
10132	2-Nitrotoluene	88-72-2	110 U	110	160	1000000 0	1
10132	3-Nitrotoluene	99-08-1	140 U	140	160	1000000 0	1
10132	4-Nitrotoluene	99-99-0	110 U	110	160	1000000 0	1
10132	PETN	78-11-5	1,100 U	1,100	3,300	1000000 0	1
10132	RDX	121-82-4	68 U	68	160	1000000 0	1
10132	Tetryl	479-45-8	83 U	83	160	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	54 U	54	160	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	54 U	54	160	1000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A	ug/kg	ug/kg	ug/kg	ug/kg	
		50-00-0	990 J	650	1,600		1
Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.9		1
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.9		1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.36 U	0.36	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous							
		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	540		1
10501	Isopropanol	67-63-0	110 U	110	540		1
10501	Methanol	67-56-1	110 U	110	540		1
Terphenyls							
		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.8		1
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,200	5.32	21.2		1
07914	Boron	7440-42-8	4.83 J	0.941	5.29		1
01650	Calcium	7440-70-2	2,620	6.48	21.2		1
01654	Iron	7439-89-6	18,500	4.98	21.2		1
01656	Lithium	7439-93-2	17.9	0.23	2.1		1
01657	Magnesium	7439-95-4	3,420	2.69	10.6		1
06958	Manganese	7439-96-5	233	0.0825	0.529		1
10145	Phosphorus	7723-14-0	318	0.592	10.6		1
01662	Potassium	7440-09-7	2,590	19.0	52.9		1
01667	Sodium	7440-23-5	148	39.4	106		1
07968	Strontium	7440-24-6	19.8	0.0656	0.529		1
06969	Tin	7440-31-5	2.43 J	1.06	10.6		1
06970	Titanium	7440-32-6	1,100	0.804	2.12		2
10146	Zirconium	7440-67-7	1.68 J	0.888	5.29		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.296	0.0647	0.216		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.4	0.0647	0.431		2
06126	Barium	7440-39-3	106	0.116	0.431		2
06127	Beryllium	7440-41-7	1.30	0.0173	0.108		2
06128	Cadmium	7440-43-9	0.248	0.0388	0.108		2
06131	Chromium	7440-47-3	50.1	0.129	0.431		2
06132	Cobalt	7440-48-4	11.1	0.0216	0.108		2
06133	Copper	7440-50-8	19.7	0.0712	0.431		2
06135	Lead	7439-92-1	13.0	0.0112	0.216		2
06138	Molybdenum	7439-98-7	0.790	0.0539	0.108		2
06139	Nickel	7440-02-0	26.9	0.108	0.431		2
06141	Selenium	7782-49-2	0.241 J	0.0431	0.431		2
06142	Silver	7440-22-4	0.0704 J	0.0129	0.108		2
06145	Thallium	7440-28-0	0.497	0.0324	0.108		2
06148	Vanadium	7440-62-2	93.3	0.0237	0.108		2
06149	Zinc	7440-66-6	114	0.604	3.24		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.104		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.7	0.87	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.9	0.87	1.6		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.7		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.26 J	0.22	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.54		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	379	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.64	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.2	0.50	0.50		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	EPA 160.3 modified	%	%	%	%	%	
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-006-SA5C-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 03:57	Laura M Krieger	1.01
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 03:07	Sara E Johnson	25.41
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 16:54	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:42	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 16:52	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 15:55	Timothy J Trees	2
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 01:49	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 21:38	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 15:54	Marie D John	22.98
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:57	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 00:22	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 22:49	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 02:29	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0691 SDG#: DE037-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103500005A	12/17/2010 18:20	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 13:17	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103500005A	12/16/2010 14:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:52	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/24/2010 10:32	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:42	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:42	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:44	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 14:45	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 14:45	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 02:19	Venia B McFadden	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0691 SDG#: DE037-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/03/2011 22:03	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102201A	12/27/2010 18:45	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102201A	12/27/2010 08:55	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.4 U	8.4	10		1.1
06192	Benzene	71-43-2	0.13 U	0.13	5.1		1.1
06192	Bromobenzene	108-86-1	0.16 U	0.16	5.1		1.1
06192	Bromochloromethane	74-97-5	0.42 U	0.42	5.1		1.1
06192	Bromodichloromethane	75-27-4	0.10 U	0.10	5.1		1.1
06192	Bromoform	75-25-2	0.51 U	0.51	5.1		1.1
06192	Bromomethane	74-83-9	0.32 U	0.32	5.1		1.1
06192	2-Butanone	78-93-3	1.5 U	1.5	10		1.1
06192	n-Butylbenzene	104-51-8	0.15 U	0.15	5.1		1.1
06192	sec-Butylbenzene	135-98-8	0.08 U	0.08	5.1		1.1
06192	tert-Butylbenzene	98-06-6	0.20 U	0.20	5.1		1.1
06192	Carbon Tetrachloride	56-23-5	0.18 U	0.18	5.1		1.1
06192	Chlorobenzene	108-90-7	0.14 U	0.14	5.1		1.1
06192	Chloroethane	75-00-3	0.16 U	0.16	5.1		1.1
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.38 U	0.38	5.1		1.1
06192	Chloroform	67-66-3	0.15 U	0.15	5.1		1.1
06192	Chloromethane	74-87-3	0.42 U	0.42	5.1		1.1
06192	2-Chlorotoluene	95-49-8	0.18 U	0.18	5.1		1.1
06192	4-Chlorotoluene	106-43-4	0.18 U	0.18	5.1		1.1
06192	Chlorotrifluoroethene	79-38-9	0.63 U	0.63	6.3		1.1
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.88 U	0.88	5.1		1.1
06192	Dibromochloromethane	124-48-1	0.25 U	0.25	5.1		1.1
06192	1,2-Dibromoethane	106-93-4	0.21 U	0.21	5.1		1.1
06192	Dibromomethane	74-95-3	0.30 U	0.30	5.1		1.1
06192	1,2-Dichlorobenzene	95-50-1	0.11 U	0.11	5.1		1.1
06192	1,3-Dichlorobenzene	541-73-1	0.15 U	0.15	5.1		1.1
06192	1,4-Dichlorobenzene	106-46-7	0.20 U	0.20	5.1		1.1
06192	Dichlorodifluoromethane	75-71-8	0.15 U	0.15	5.1		1.1
06192	1,1-Dichloroethane	75-34-3	0.13 U	0.13	5.1		1.1
06192	1,2-Dichloroethane	107-06-2	0.19 U	0.19	5.1		1.1
06192	1,1-Dichloroethene	75-35-4	0.49 U	0.49	5.1		1.1
06192	cis-1,2-Dichloroethene	156-59-2	0.24 U	0.24	5.1		1.1
06192	trans-1,2-Dichloroethene	156-60-5	0.15 U	0.15	5.1		1.1
06192	1,2-Dichloropropane	78-87-5	0.21 U	0.21	5.1		1.1
06192	1,3-Dichloropropane	142-28-9	0.10 U	0.10	5.1		1.1
06192	2,2-Dichloropropane	594-20-7	0.21 U	0.21	5.1		1.1
06192	1,1-Dichloropropene	563-58-6	0.16 U	0.16	5.1		1.1
06192	cis-1,3-Dichloropropene	10061-01-5	0.20 U	0.20	5.1		1.1
06192	trans-1,3-Dichloropropene	10061-02-6	0.21 U	0.21	5.1		1.1
06192	Ethylbenzene	100-41-4	0.08 U	0.08	5.1		1.1
06192	Freon 113	76-13-1	0.14 U	0.14	5.1		1.1
06192	Freon 133a	75-88-7	0.63 U	0.63	6.3		1.1
06192	Hexachlorobutadiene	87-68-3	0.18 U	0.18	5.1		1.1
06192	2-Hexanone	591-78-6	2.0 U	2.0	10		1.1
06192	Isopropylbenzene	98-82-8	0.08 U	0.08	5.1		1.1
06192	p-Isopropyltoluene	99-87-6	0.14 U	0.14	5.1		1.1
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.26 U	0.26	5.1		1.1
06192	4-Methyl-2-pentanone	108-10-1	0.49 U	0.49	10		1.1
06192	Methylene Chloride	75-09-2	0.97 J	0.30	5.1		1.1
06192	n-Propylbenzene	103-65-1	0.09 U	0.09	5.1		1.1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.13 U	0.13	5.1		1.1
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.14 U	0.14	5.1		1.1
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.29 U	0.29	5.1		1.1
06192	Tetrachloroethene	127-18-4	0.25 U	0.25	5.1		1.1
06192	Toluene	108-88-3	0.10 U	0.10	5.1		1.1
06192	1,2,3-Trichlorobenzene	87-61-6	0.18 U	0.18	5.1		1.1
06192	1,2,4-Trichlorobenzene	120-82-1	0.23 U	0.23	5.1		1.1
06192	1,1,1-Trichloroethane	71-55-6	0.25 U	0.25	5.1		1.1
06192	1,1,2-Trichloroethane	79-00-5	0.34 U	0.34	5.1		1.1
06192	Trichloroethene	79-01-6	0.19 U	0.19	5.1		1.1
06192	Trichlorofluoromethane	75-69-4	0.37 U	0.37	5.1		1.1
06192	1,2,3-Trichloropropane	96-18-4	0.42 U	0.42	5.1		1.1
06192	1,2,4-Trimethylbenzene	95-63-6	0.51 U	0.51	5.1		1.1
06192	1,3,5-Trimethylbenzene	108-67-8	0.13 U	0.13	5.1		1.1
06192	Vinyl Chloride	75-01-4	0.25 U	0.25	5.1		1.1
06192	m+p-Xylene	179601-23-1	0.21 U	0.21	5.1		1.1
06192	o-Xylene	95-47-6	0.21 U	0.21	5.1		1.1
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.3 U	5.3	16		23.28
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	129	19.1	38.2		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U 760	2,300		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U 0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U 0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U 0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U 0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U 0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21		1
10138	Chrysene	218-01-9	0.38	U 0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U 0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U 6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U 6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J 6.9	21		1
10138	Fluoranthene	206-44-0	0.76	U 0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U 0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U 0.76	1.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76 U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76 U	0.76	1.9		1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.							
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.0		22.64
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	86 U	86	170	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	57 U	57	170	1000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110 U	110	340	1000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110 U	110	340	1000000	1
10132	1,3-Dinitrobenzene	99-65-0	57 U	57	170	1000000	1
10132	2,4-Dinitrotoluene	121-14-2	57 U	57	170	1000000	1
10132	2,6-Dinitrotoluene	606-20-2	57 U	57	170	1000000	1
10132	HMX	2691-41-0	140 U	140	430	1000000	1
10132	Nitrobenzene	98-95-3	57 U	57	170	1000000	1
10132	Nitroglycerin	55-63-0	1,100 U	1,100	3,400	1000000	1
10132	2-Nitrotoluene	88-72-2	110 U	110	170	1000000	1
10132	3-Nitrotoluene	99-08-1	140 U	140	170	1000000	1
10132	4-Nitrotoluene	99-99-0	110 U	110	170	1000000	1
10132	PETN	78-11-5	1,100 U	1,100	3,400	1000000	1
10132	RDX	121-82-4	72 U	72	170	1000000	1
10132	Tetryl	479-45-8	88 U	88	170	1000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	57 U	57	170	1000000	1

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Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives							
10132	2,4,6-Trinitrotoluene	118-96-7	57 ug/kg	U 57 ug/kg	170 ug/kg	1000000 ug/kg	1
HPLC Organics							
04173	17a Formaldehyde by	50-00-0	690 ug/kg	U 690 ug/kg	1,700 ug/kg		1
Pesticides/PCBs							
10225	Aroclor 5432	63496-31-1	1.1 U	1.1 ug/kg	3.8 ug/kg		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1 ug/kg	3.8 ug/kg		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1 ug/kg	3.8 ug/kg		1
10225	PCB-1016	12674-11-2	0.38 U	0.38 ug/kg	1.9 ug/kg		1
10225	PCB-1221	11104-28-2	0.57 U	0.57 ug/kg	1.9 ug/kg		1
10225	PCB-1232	11141-16-5	0.60 U	0.60 ug/kg	1.9 ug/kg		1
10225	PCB-1242	53469-21-9	0.57 U	0.57 ug/kg	1.9 ug/kg		1
10225	PCB-1248	12672-29-6	0.38 U	0.38 ug/kg	1.9 ug/kg		1
10225	PCB-1254	11097-69-1	0.44 J	0.38 ug/kg	1.9 ug/kg		1
10225	PCB-1260	11096-82-5	0.38 U	0.38 ug/kg	1.9 ug/kg		1
10225	PCB-1262	37324-23-5	0.38 U	0.38 ug/kg	1.9 ug/kg		1
10225	PCB-1268	11100-14-4	0.38 U	0.38 ug/kg	1.9 ug/kg		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous							
10501	Ethanol	64-17-5	110 U	110 ug/kg	570 ug/kg		1
10501	Isopropanol	67-63-0	110 U	110 ug/kg	570 ug/kg		1
10501	Methanol	67-56-1	110 U	110 ug/kg	570 ug/kg		1
Terphenyls							
10318	m-Terphenyl	92-06-8	1.7 U	1.7 mg/kg	4.0 mg/kg		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7 mg/kg	4.0 mg/kg		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7 mg/kg	4.0 mg/kg		1
Metals							
01643	Aluminum	7429-90-5	26,300	5.66 mg/kg	22.5 mg/kg		1
07914	Boron	7440-42-8	5.54 J	1.00 mg/kg	5.62 mg/kg		1
01650	Calcium	7440-70-2	7,160	6.89 mg/kg	22.5 mg/kg		1
01654	Iron	7439-89-6	33,600	10.6 mg/kg	45.0 mg/kg		2
01656	Lithium	7439-93-2	29.5	0.25 mg/kg	2.2 mg/kg		1
01657	Magnesium	7439-95-4	7,170	2.86 mg/kg	11.2 mg/kg		1
06958	Manganese	7439-96-5	332	0.0877 mg/kg	0.562 mg/kg		1
10145	Phosphorus	7723-14-0	397	0.630 mg/kg	11.2 mg/kg		1
01662	Potassium	7440-09-7	3,800	20.2 mg/kg	56.2 mg/kg		1
01667	Sodium	7440-23-5	189	41.9 mg/kg	112 mg/kg		1
07968	Strontium	7440-24-6	33.9	0.0697 mg/kg	0.562 mg/kg		1
06969	Tin	7440-31-5	2.94 J	1.12 mg/kg	11.2 mg/kg		1
06970	Titanium	7440-32-6	1,560	0.854 mg/kg	2.25 mg/kg		2
10146	Zirconium	7440-67-7	4.82 J	0.944 mg/kg	5.62 mg/kg		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.214 J	0.0681	0.227		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.66	0.0681	0.454		2
06126	Barium	7440-39-3	123	0.123	0.454		2
06127	Beryllium	7440-41-7	0.962	0.0182	0.114		2
06128	Cadmium	7440-43-9	0.102 J	0.0409	0.114		2
06131	Chromium	7440-47-3	43.1	0.136	0.454		2
06132	Cobalt	7440-48-4	9.56	0.0227	0.114		2
06133	Copper	7440-50-8	12.3	0.0749	0.454		2
06135	Lead	7439-92-1	9.46	0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.419	0.0568	0.114		2
06139	Nickel	7440-02-0	19.0	0.114	0.454		2
06141	Selenium	7782-49-2	0.340 J	0.0454	0.454		2
06142	Silver	7440-22-4	0.0310 J	0.0136	0.114		2
06145	Thallium	7440-28-0	0.392	0.0341	0.114		2
06148	Vanadium	7440-62-2	89.1	0.0250	0.114		2
06149	Zinc	7440-66-6	91.3	0.636	3.41		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.110		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.6	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	16.8	0.92	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.4		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.28 J	0.23	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.21 U	0.21	0.58		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	400	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.05	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	12.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 04:19	Laura M Krieger	1.1
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 03:27	Sara E Johnson	23.28
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 16:40	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 16:38	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 12:48	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 02:15	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 22:11	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 16:30	Marie D John	22.64
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:59	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 01:05	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 22:59	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 02:48	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

DUP13 SDG#: DE037-02FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103500005A	12/17/2010 18:34	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 11:47	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103500005A	12/16/2010 14:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/22/2010 02:56	Tara L Snyder	2
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:56	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:45	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:34	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:45	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:45	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:45	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 14:59	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 14:59	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 02:44	Venia B McFadden	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

DUP13 SDG#: DE037-02FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/03/2011 22:19	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:14	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.1 U	7.1	8.5		0.95
06192	Benzene	71-43-2	0.11 U	0.11	4.3		0.95
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.3		0.95
06192	Bromochloromethane	74-97-5	0.35 U	0.35	4.3		0.95
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.3		0.95
06192	Bromoform	75-25-2	0.43 U	0.43	4.3		0.95
06192	Bromomethane	74-83-9	0.27 U	0.27	4.3		0.95
06192	2-Butanone	78-93-3	1.3 U	1.3	8.5		0.95
06192	n-Butylbenzene	104-51-8	0.13 U	0.13	4.3		0.95
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.3		0.95
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.3		0.95
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.3		0.95
06192	Chlorobenzene	108-90-7	0.12 U	0.12	4.3		0.95
06192	Chloroethane	75-00-3	0.14 U	0.14	4.3		0.95
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.32 U	0.32	4.3		0.95
06192	Chloroform	67-66-3	0.13 U	0.13	4.3		0.95
06192	Chloromethane	74-87-3	0.35 U	0.35	4.3		0.95
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.3		0.95
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.3		0.95
06192	Chlorotrifluoroethene	79-38-9	0.53 U	0.53	5.3		0.95
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.75 U	0.75	4.3		0.95
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.3		0.95
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.3		0.95
06192	Dibromomethane	74-95-3	0.26 U	0.26	4.3		0.95
06192	1,2-Dichlorobenzene	95-50-1	0.1 U	0.1	4.3		0.95
06192	1,3-Dichlorobenzene	541-73-1	0.13 U	0.13	4.3		0.95
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.3		0.95
06192	Dichlorodifluoromethane	75-71-8	0.13 U	0.13	4.3		0.95
06192	1,1-Dichloroethane	75-34-3	0.11 U	0.11	4.3		0.95
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.3		0.95
06192	1,1-Dichloroethene	75-35-4	0.42 U	0.42	4.3		0.95
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.3		0.95
06192	trans-1,2-Dichloroethene	156-60-5	0.13 U	0.13	4.3		0.95
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.3		0.95
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.3		0.95
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.3		0.95
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.3		0.95
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.3		0.95
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.3		0.95
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.3		0.95
06192	Freon 113	76-13-1	0.12 U	0.12	4.3		0.95
06192	Freon 133a	75-88-7	0.53 U	0.53	5.3		0.95
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.3		0.95
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.5		0.95
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.3		0.95
06192	p-Isopropyltoluene	99-87-6	0.12 U	0.12	4.3		0.95
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.3		0.95
06192	4-Methyl-2-pentanone	108-10-1	0.42 U	0.42	8.5		0.95
06192	Methylene Chloride	75-09-2	0.63 J	0.26	4.3		0.95
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.3		0.95

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Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.11 U	0.11	4.3		0.95
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12 U	0.12	4.3		0.95
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.3		0.95
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.3		0.95
06192	Toluene	108-88-3	0.09 U	0.09	4.3		0.95
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.3		0.95
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.3		0.95
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.3		0.95
06192	1,1,2-Trichloroethane	79-00-5	0.29 U	0.29	4.3		0.95
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.3		0.95
06192	Trichlorofluoromethane	75-69-4	0.31 U	0.31	4.3		0.95
06192	1,2,3-Trichloropropane	96-18-4	0.35 U	0.35	4.3		0.95
06192	1,2,4-Trimethylbenzene	95-63-6	0.43 U	0.43	4.3		0.95
06192	1,3,5-Trimethylbenzene	108-67-8	0.11 U	0.11	4.3		0.95
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.3		0.95
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.3		0.95
06192	o-Xylene	95-47-6	0.18 U	0.18	4.3		0.95
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.4 U	4.4	13		19.56
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	18.8 U	18.8	37.6		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	75	U 75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	750	U 750	2,300		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	75	U 75	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
	The following compounds were detected in the method blank at the respective concentrations of: diethylphthalate 28 ug/kg bis(2-ethylhexyl)phthalate 18 ug/kg These blank values were not subtracted from the analytical results.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U 0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.75	U 0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.75	U 0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U 0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U 0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U 0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8	U 6.8	20		1
10138	Di-n-butylphthalate	84-74-2	6.8	U 6.8	20		1
10138	Chrysene	218-01-9	0.46	J 0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U 0.75	1.9		1
10138	Diethylphthalate	84-66-2	6.8	U 6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8	U 6.8	20		1

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Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
			ug/kg	ug/kg	ug/kg	ug/kg	
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.0 J	6.8	20		1
10138	Fluoranthene	206-44-0	0.75 U	0.75	1.9		1
10138	Fluorene	86-73-7	0.75 U	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75 U	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.75 U	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.75 U	0.75	1.9		1
10138	Naphthalene	91-20-3	0.75 U	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75 U	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8 U	6.8	20		1
10138	Phenanthrene	85-01-8	0.75 U	0.75	1.9		1
10138	Pyrene	129-00-0	0.75 U	0.75	1.9		1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.							
GC Volatiles TPH GRO SW-846 8015B mod							
			mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.0		22.73
Explosives SW-846 8330A							
			ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	85	U 85	170	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	56	U 56	170	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U 110	340	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U 110	340	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	56	U 56	170	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	56	U 56	170	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	56	U 56	170	1000000 0	1
10132	HMX	2691-41-0	140	U 140	420	1000000 0	1
10132	Nitrobenzene	98-95-3	56	U 56	170	1000000 0	1
10132	Nitroglycerin	55-63-0	1,100	U 1,100	3,400	1000000 0	1
10132	2-Nitrotoluene	88-72-2	110	U 110	170	1000000 0	1
10132	3-Nitrotoluene	99-08-1	140	U 140	170	1000000 0	1
10132	4-Nitrotoluene	99-99-0	110	U 110	170	1000000 0	1
10132	PETN	78-11-5	1,100	U 1,100	3,400	1000000 0	1
10132	RDX	121-82-4	71	U 71	170	1000000 0	1

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Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives							
		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	Tetryl	479-45-8	86	U 86	170	10000000	1
						0	
10132	1,3,5-Trinitrobenzene	99-35-4	56	U 56	170	10000000	1
						0	
10132	2,4,6-Trinitrotoluene	118-96-7	56	U 56	170	10000000	1
						0	
HPLC Organics							
		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by 8315A	50-00-0	680	U 680	1,700		1
Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U 1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U 1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U 1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U 0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U 0.56	1.9		1
10225	PCB-1232	11141-16-5	0.59	U 0.59	1.9		1
10225	PCB-1242	53469-21-9	0.56	U 0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U 0.37	1.9		1
10225	PCB-1254	11097-69-1	0.97	J 0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37	U 0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U 0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U 0.37	1.9		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous							
		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110	U 110	560		1
10501	Isopropanol	67-63-0	110	U 110	560		1
10501	Methanol	67-56-1	110	U 110	560		1
Terphenyls							
		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7	U 1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U 1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U 1.7	4.0		1
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	23,700	5.46	21.7		1
07914	Boron	7440-42-8	7.11	0.966	5.43		1
01650	Calcium	7440-70-2	7,330	6.65	21.7		1
01654	Iron	7439-89-6	29,600	10.2	43.4		2
01656	Lithium	7439-93-2	29.0	0.24	2.2		1
01657	Magnesium	7439-95-4	7,030	2.76	10.9		1
06958	Manganese	7439-96-5	387	0.0847	0.543		1
10145	Phosphorus	7723-14-0	419	0.608	10.9		1
01662	Potassium	7440-09-7	3,630	19.5	54.3		1
01667	Sodium	7440-23-5	198	40.5	109		1
07968	Strontium	7440-24-6	32.2	0.0673	0.543		1

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Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
06969	Tin	7440-31-5	2.29 J	1.09	10.9		1
06970	Titanium	7440-32-6	1,230	0.825	2.17		2
10146	Zirconium	7440-67-7	3.82 J	0.912	5.43		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.272	0.0670	0.223		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.87	0.0670	0.447		2
06126	Barium	7440-39-3	128	0.121	0.447		2
06127	Beryllium	7440-41-7	0.957	0.0179	0.112		2
06128	Cadmium	7440-43-9	0.108 J	0.0402	0.112		2
06131	Chromium	7440-47-3	38.2	0.134	0.447		2
06132	Cobalt	7440-48-4	9.01	0.0223	0.112		2
06133	Copper	7440-50-8	12.0	0.0738	0.447		2
06135	Lead	7439-92-1	9.45	0.0116	0.223		2
06138	Molybdenum	7439-98-7	0.517	0.0559	0.112		2
06139	Nickel	7440-02-0	17.0	0.112	0.447		2
06141	Selenium	7782-49-2	0.299 J	0.0447	0.447		2
06142	Silver	7440-22-4	0.0341 J	0.0134	0.112		2
06145	Thallium	7440-28-0	0.361	0.0335	0.112		2
06148	Vanadium	7440-62-2	76.5	0.0246	0.112		2
06149	Zinc	7440-66-6	81.2	0.626	3.35		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.112		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.3	0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	13.0	0.90	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	33.9		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.26 J	0.23	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.55		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	399	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

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SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	Wet Chemistry	SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.16	0.0100	0.0100		1
	Wet Chemistry	EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	11.4	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-006-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 04:41	Laura M Krieger	0.95
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 03:46	Sara E Johnson	19.56
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 16:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:42	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 16:49	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	12/30/2010 21:03	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 00:33	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 19:56	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 17:07	Marie D John	22.73
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:58	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 01:47	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:08	James H Place	1

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SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
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S0645 SDG#: DE037-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 03:06	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 21:53	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 06:33	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/22/2010 02:31	Tara L Snyder	2
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:31	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:24	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:25	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:24	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:24	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:46	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 14:02	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 14:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 01:07	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/03/2011 22:35	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102201A	12/27/2010 18:47	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102201A	12/27/2010 08:55	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	270	7.1	8.5		0.95
06192	Benzene	71-43-2	21	0.11	4.3		0.95
06192	Bromobenzene	108-86-1	19	0.14	4.3		0.95
06192	Bromochloromethane	74-97-5	21	0.35	4.3		0.95
06192	Bromodichloromethane	75-27-4	21	0.09	4.3		0.95
06192	Bromoform	75-25-2	18	0.43	4.3		0.95
06192	Bromomethane	74-83-9	15	0.27	4.3		0.95
06192	2-Butanone	78-93-3	180	1.3	8.5		0.95
06192	n-Butylbenzene	104-51-8	17	0.13	4.3		0.95
06192	sec-Butylbenzene	135-98-8	18	0.06	4.3		0.95
06192	tert-Butylbenzene	98-06-6	19	0.17	4.3		0.95
06192	Carbon Tetrachloride	56-23-5	22	0.15	4.3		0.95
06192	Chlorobenzene	108-90-7	20	0.12	4.3		0.95
06192	Chloroethane	75-00-3	17	0.14	4.3		0.95
06192	2-Chloroethyl Vinyl Ether	110-75-8	18	0.32	4.3		0.95
06192	Chloroform	67-66-3	22	0.13	4.3		0.95
06192	Chloromethane	74-87-3	16	0.35	4.3		0.95
06192	2-Chlorotoluene	95-49-8	19	0.15	4.3		0.95
06192	4-Chlorotoluene	106-43-4	19	0.15	4.3		0.95
06192	Chlorotrifluoroethene	79-38-9	21	0.51	5.1		0.91
06192	1,2-Dibromo-3-chloropropane	96-12-8	17	0.75	4.3		0.95
06192	Dibromochloromethane	124-48-1	20	0.21	4.3		0.95
06192	1,2-Dibromoethane	106-93-4	19	0.18	4.3		0.95
06192	Dibromomethane	74-95-3	20	0.26	4.3		0.95
06192	1,2-Dichlorobenzene	95-50-1	18	0.1	4.3		0.95
06192	1,3-Dichlorobenzene	541-73-1	17	0.13	4.3		0.95
06192	1,4-Dichlorobenzene	106-46-7	17	0.17	4.3		0.95
06192	Dichlorodifluoromethane	75-71-8	11	0.13	4.3		0.95
06192	1,1-Dichloroethane	75-34-3	22	0.11	4.3		0.95
06192	1,2-Dichloroethane	107-06-2	21	0.16	4.3		0.95
06192	1,1-Dichloroethene	75-35-4	22	0.42	4.3		0.95
06192	cis-1,2-Dichloroethene	156-59-2	21	0.20	4.3		0.95
06192	trans-1,2-Dichloroethene	156-60-5	21	0.13	4.3		0.95
06192	1,2-Dichloropropane	78-87-5	21	0.18	4.3		0.95
06192	1,3-Dichloropropane	142-28-9	20	0.09	4.3		0.95
06192	2,2-Dichloropropane	594-20-7	21	0.18	4.3		0.95
06192	1,1-Dichloropropene	563-58-6	21	0.14	4.3		0.95
06192	cis-1,3-Dichloropropene	10061-01-5	18	0.17	4.3		0.95
06192	trans-1,3-Dichloropropene	10061-02-6	19	0.18	4.3		0.95
06192	Ethylbenzene	100-41-4	20	0.06	4.3		0.95
06192	Freon 113	76-13-1	22	0.12	4.3		0.95
06192	Freon 133a	75-88-7	19	0.51	5.1		0.91
06192	Hexachlorobutadiene	87-68-3	14	0.15	4.3		0.95
06192	2-Hexanone	591-78-6	81	1.7	8.5		0.95
06192	Isopropylbenzene	98-82-8	19	0.06	4.3		0.95
06192	p-Isopropyltoluene	99-87-6	18	0.12	4.3		0.95
06192	Methyl Tertiary Butyl Ether	1634-04-4	19	0.22	4.3		0.95
06192	4-Methyl-2-pentanone	108-10-1	70	0.42	8.5		0.95
06192	Methylene Chloride	75-09-2	22	0.26	4.3		0.95
06192	n-Propylbenzene	103-65-1	20	0.07	4.3		0.95

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	19	0.11	4.3		0.95
06192	1,1,1,2-Tetrachloroethane	630-20-6	21	0.12	4.3		0.95
06192	1,1,2,2-Tetrachloroethane	79-34-5	19	0.24	4.3		0.95
06192	Tetrachloroethene	127-18-4	20	0.21	4.3		0.95
06192	Toluene	108-88-3	21	0.09	4.3		0.95
06192	1,2,3-Trichlorobenzene	87-61-6	13	0.15	4.3		0.95
06192	1,2,4-Trichlorobenzene	120-82-1	13	0.19	4.3		0.95
06192	1,1,1-Trichloroethane	71-55-6	22	0.21	4.3		0.95
06192	1,1,2-Trichloroethane	79-00-5	20	0.29	4.3		0.95
06192	Trichloroethene	79-01-6	20	0.16	4.3		0.95
06192	Trichlorofluoromethane	75-69-4	19	0.31	4.3		0.95
06192	1,2,3-Trichloropropane	96-18-4	19	0.35	4.3		0.95
06192	1,2,4-Trimethylbenzene	95-63-6	19	0.43	4.3		0.95
06192	1,3,5-Trimethylbenzene	108-67-8	19	0.11	4.3		0.95
06192	Vinyl Chloride	75-01-4	17	0.21	4.3		0.95
06192	m+p-Xylene	179601-23-1	40	0.18	4.3		0.95
06192	o-Xylene	95-47-6	19	0.18	4.3		0.95
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	130	5.0	15		22.32
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	711	18.8	37.6		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,800	19	190		1
04688	Acenaphthylene	208-96-8	1,800	19	190		1
04688	Aniline	62-53-3	1,100	190	560		1
04688	Anthracene	120-12-7	1,800	19	190		1
04688	Benzidine	92-87-5	3,500	J 1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,800	19	190		1
04688	Benzo(a)pyrene	50-32-8	1,600	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,700	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,500	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,700	19	190		1
04688	Benzoic acid	65-85-0	1,200	190	560		1
04688	Benzyl alcohol	100-51-6	1,800	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700	19	190		1
04688	Butylbenzylphthalate	85-68-7	2,000	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,900	19	190		1
04688	Carbazole	86-74-8	1,800	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	1,800	38	190		1
04688	4-Chloroaniline	106-47-8	810	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,800	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800	19	190		1
04688	2-Chloronaphthalene	91-58-7	1,800	19	190		1
04688	2-Chlorophenol	95-57-8	1,800	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,800	38	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Chrysene	218-01-9	1,800	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,600	19	190		1
04688	Dibenzofuran	132-64-9	1,800	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,700	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,600	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,600	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	690	110	380		1
04688	2,4-Dichlorophenol	120-83-2	1,900	19	190		1
04688	Diethylphthalate	84-66-2	1,900	19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,900	38	190		1
04688	3,5-Dimethylphenol	108-68-9	1,900	38	190		1
04688	Dimethylphthalate	131-11-3	1,800	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,500	190	560		1
04688	2,4-Dinitrophenol	51-28-5	2,000	J 750	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	1,800	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,800	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,900	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	19	380		1
04688	Fluoranthene	206-44-0	1,800	19	190		1
04688	Fluorene	86-73-7	1,800	19	190		1
04688	Hexachlorobenzene	118-74-1	1,700	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,500	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,700	190	560		1
04688	Hexachloroethane	67-72-1	1,600	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,600	19	190		1
04688	2-Methylphenol	95-48-7	1,900	38	190		1
04688	4-Methylphenol	106-44-5	1,800	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	1,800	19	190		1
04688	3-Nitroaniline	99-09-2	1,700	38	190		1
04688	4-Nitroaniline	100-01-6	1,400	75	190		1
04688	Nitrobenzene	98-95-3	1,700	19	190		1
04688	2-Nitrophenol	88-75-5	1,700	19	190		1
04688	4-Nitrophenol	100-02-7	1,700	190	560		1
04688	N-Nitrosodimethylamine	62-75-9	1,800	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	2,000	19	190		1
04688	Pentachlorophenol	87-86-5	1,300	190	560		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	1,800	19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Pyrene	129-00-0	1,900	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,600	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	1,700	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	1,800	38	190		1

The following compounds were detected in the method blank at the respective concentrations of:

diethylphthalate 28 ug/kg

bis(2-ethylhexyl)phthalate 18 ug/kg

These blank values were not subtracted from the analytical results.

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	32	0.75	1.9		1
10138	Acenaphthylene	208-96-8	34	0.38	1.9		1
10138	Anthracene	120-12-7	35	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	34	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	33	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	38	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	18	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	35	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	39	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	39	6.8	20		1
10138	Chrysene	218-01-9	34	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	21	0.75	1.9		1
10138	Diethylphthalate	84-66-2	40	6.8	20		1
10138	Dimethylphthalate	131-11-3	36	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	43	6.8	20		1
10138	Fluoranthene	206-44-0	38	0.75	1.9		1
10138	Fluorene	86-73-7	34	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	20	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	32	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	30	0.75	1.9		1
10138	Naphthalene	91-20-3	31	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	30	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	43	6.8	20		1
10138	Phenanthrene	85-01-8	32	0.75	1.9		1
10138	Pyrene	129-00-0	32	0.75	1.9		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

GC Volatiles	TPH GRO	SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
	mod						
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	7.9	0.2	1.1		24.65

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	3,000	85	170	1000000 1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	3,000	56	170	0 1000000 1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110 U	110	340	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110 U	110	340	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	2,900	56	170	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	2,800	56	170	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	3,000	56	170	1000000 0	1
10132	HMX	2691-41-0	2,300	140	420	1000000 0	1
10132	Nitrobenzene	98-95-3	2,800	56	170	1000000 0	1
10132	Nitroglycerin	55-63-0	63,000	1,100	3,400	1000000 0	1
10132	2-Nitrotoluene	88-72-2	3,000	110	170	1000000 0	1
10132	3-Nitrotoluene	99-08-1	3,000	140	170	1000000 0	1
10132	4-Nitrotoluene	99-99-0	3,000	110	170	1000000 0	1
10132	PETN	78-11-5	73,000	1,100	3,400	1000000 0	1
10132	RDX	121-82-4	2,700	71	170	1000000 0	1
10132	Tetryl	479-45-8	3,700	86	170	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	3,300	56	170	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	3,000	56	170	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by 8315A	50-00-0	5,500	680	1,700		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7		1
10225	PCB-1016	12674-11-2	19	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.59 U	0.59	1.9		1
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	6.6	0.37	1.9		1
10225	PCB-1260	11096-82-5	21	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous	SW-846 8015B		ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	2,300	110	560		1
10501	Isopropanol	67-63-0	2,400	110	560		1
10501	Methanol	67-56-1	2,100	110	560		1
Terphenyls	SW-846 8015B		mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 J	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7 J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.8 J	1.7	4.0		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	26,900	5.62	22.3		1
07914	Boron	7440-42-8	217	0.995	5.59		1
01650	Calcium	7440-70-2	6,690	6.85	22.3		1
01654	Iron	7439-89-6	30,100	5.26	22.3		1
01656	Lithium	7439-93-2	136	0.25	2.2		1
01657	Magnesium	7439-95-4	6,490	2.84	11.2		1
06958	Manganese	7439-96-5	480	0.0872	0.559		1
10145	Phosphorus	7723-14-0	479	0.626	11.2		1
01662	Potassium	7440-09-7	5,130	20.1	55.9		1
01667	Sodium	7440-23-5	1,230	41.7	112		1
07968	Strontium	7440-24-6	139	0.0693	0.559		1
06969	Tin	7440-31-5	424	1.12	11.2		1
06970	Titanium	7440-32-6	1,820	0.849	2.23		2
10146	Zirconium	7440-67-7	109	0.939	5.59		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.943	0.0657	0.219		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.93	0.0657	0.438		2
06126	Barium	7440-39-3	135	0.118	0.438		2
06127	Beryllium	7440-41-7	1.95	0.0175	0.110		2
06128	Cadmium	7440-43-9	1.52	0.0394	0.110		2
06131	Chromium	7440-47-3	49.1	0.131	0.438		2
06132	Cobalt	7440-48-4	63.4	0.0219	0.110		2
06133	Copper	7440-50-8	22.5	0.0723	0.438		2
06135	Lead	7439-92-1	12.5	0.0114	0.219		2
06138	Molybdenum	7439-98-7	13.4	0.0548	0.110		2
06139	Nickel	7440-02-0	28.1	0.110	0.438		2
06141	Selenium	7782-49-2	2.64	0.0438	0.438		2
06142	Silver	7440-22-4	13.4	0.0131	0.110		2
06145	Thallium	7440-28-0	0.853	0.0329	0.110		2
06148	Vanadium	7440-62-2	89.7	0.0241	0.110		2
06149	Zinc	7440-66-6	91.9	0.614	3.29		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
00159	Mercury	7439-97-6	mg/kg	mg/kg	mg/kg	mg/kg	1
			0.171	0.0031	0.108		
Wet Chemistry							
			mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	12.6	0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	30.0	0.90	1.7		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	525	10.2	33.9		1
SW-846 7199							
			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	44.8	1.1	5.6		5
SW-846 9012B							
			mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	6.0	0.20	0.55		1
Wet Chemistry							
			%	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-006-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 05:04	Laura M Krieger	0.95
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 05:48	Laura M Krieger	0.91
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 04:05	Sara E Johnson	22.32
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:00	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 16:57	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	12/30/2010 21:21	Timothy J Trees	1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 00:58	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 20:30	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 17:44	Marie D John	24.65
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:55	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 02:29	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:18	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 03:25	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 22:08	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 07:18	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:42	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:33	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

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Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:33	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:33	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:50	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 14:31	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 14:31	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 01:55	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/03/2011 22:59	Venia B McFadden	5
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102201A	12/27/2010 18:48	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102201A	12/27/2010 08:55	Nancy J Shoop	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	280	6.9	8.2		0.91
06192	Benzene	71-43-2	20	0.10	4.1		0.91
06192	Bromobenzene	108-86-1	16	0.13	4.1		0.91
06192	Bromochloromethane	74-97-5	19	0.34	4.1		0.91
06192	Bromodichloromethane	75-27-4	19	0.08	4.1		0.91
06192	Bromoform	75-25-2	17	0.41	4.1		0.91
06192	Bromomethane	74-83-9	13	0.26	4.1		0.91
06192	2-Butanone	78-93-3	180	1.3	8.2		0.91
06192	n-Butylbenzene	104-51-8	14	0.12	4.1		0.91
06192	sec-Butylbenzene	135-98-8	15	0.06	4.1		0.91
06192	tert-Butylbenzene	98-06-6	15	0.16	4.1		0.91
06192	Carbon Tetrachloride	56-23-5	20	0.14	4.1		0.91
06192	Chlorobenzene	108-90-7	17	0.11	4.1		0.91
06192	Chloroethane	75-00-3	14	0.13	4.1		0.91
06192	2-Chloroethyl Vinyl Ether	110-75-8	18	0.31	4.1		0.91
06192	Chloroform	67-66-3	20	0.12	4.1		0.91
06192	Chloromethane	74-87-3	15	0.34	4.1		0.91
06192	2-Chlorotoluene	95-49-8	16	0.14	4.1		0.91
06192	4-Chlorotoluene	106-43-4	15	0.14	4.1		0.91
06192	Chlorotrifluoroethene	79-38-9	22	0.53	5.3		0.93
06192	1,2-Dibromo-3-chloropropane	96-12-8	16	0.72	4.1		0.91
06192	Dibromochloromethane	124-48-1	18	0.21	4.1		0.91
06192	1,2-Dibromoethane	106-93-4	18	0.17	4.1		0.91
06192	Dibromomethane	74-95-3	19	0.25	4.1		0.91
06192	1,2-Dichlorobenzene	95-50-1	15	0.09	4.1		0.91
06192	1,3-Dichlorobenzene	541-73-1	14	0.12	4.1		0.91
06192	1,4-Dichlorobenzene	106-46-7	14	0.16	4.1		0.91
06192	Dichlorodifluoromethane	75-71-8	10	0.12	4.1		0.91
06192	1,1-Dichloroethane	75-34-3	20	0.10	4.1		0.91
06192	1,2-Dichloroethane	107-06-2	19	0.15	4.1		0.91
06192	1,1-Dichloroethene	75-35-4	20	0.40	4.1		0.91
06192	cis-1,2-Dichloroethene	156-59-2	19	0.20	4.1		0.91
06192	trans-1,2-Dichloroethene	156-60-5	19	0.12	4.1		0.91
06192	1,2-Dichloropropane	78-87-5	19	0.17	4.1		0.91
06192	1,3-Dichloropropane	142-28-9	19	0.08	4.1		0.91
06192	2,2-Dichloropropane	594-20-7	19	0.17	4.1		0.91
06192	1,1-Dichloropropene	563-58-6	19	0.13	4.1		0.91
06192	cis-1,3-Dichloropropene	10061-01-5	17	0.16	4.1		0.91
06192	trans-1,3-Dichloropropene	10061-02-6	17	0.17	4.1		0.91
06192	Ethylbenzene	100-41-4	17	0.06	4.1		0.91
06192	Freon 113	76-13-1	20	0.11	4.1		0.91
06192	Freon 133a	75-88-7	20	0.53	5.3		0.93
06192	Hexachlorobutadiene	87-68-3	10	0.14	4.1		0.91
06192	2-Hexanone	591-78-6	82	1.6	8.2		0.91
06192	Isopropylbenzene	98-82-8	16	0.06	4.1		0.91
06192	p-Isopropyltoluene	99-87-6	15	0.11	4.1		0.91
06192	Methyl Tertiary Butyl Ether	1634-04-4	18	0.22	4.1		0.91
06192	4-Methyl-2-pentanone	108-10-1	72	0.40	8.2		0.91
06192	Methylene Chloride	75-09-2	19	0.25	4.1		0.91
06192	n-Propylbenzene	103-65-1	17	0.07	4.1		0.91

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	16	0.10	4.1		0.91
06192	1,1,1,2-Tetrachloroethane	630-20-6	18	0.11	4.1		0.91
06192	1,1,2,2-Tetrachloroethane	79-34-5	18	0.24	4.1		0.91
06192	Tetrachloroethene	127-18-4	17	0.21	4.1		0.91
06192	Toluene	108-88-3	18	0.08	4.1		0.91
06192	1,2,3-Trichlorobenzene	87-61-6	10	0.14	4.1		0.91
06192	1,2,4-Trichlorobenzene	120-82-1	10	0.19	4.1		0.91
06192	1,1,1-Trichloroethane	71-55-6	20	0.21	4.1		0.91
06192	1,1,2-Trichloroethane	79-00-5	18	0.28	4.1		0.91
06192	Trichloroethene	79-01-6	18	0.15	4.1		0.91
06192	Trichlorofluoromethane	75-69-4	17	0.30	4.1		0.91
06192	1,2,3-Trichloropropane	96-18-4	18	0.34	4.1		0.91
06192	1,2,4-Trimethylbenzene	95-63-6	16	0.41	4.1		0.91
06192	1,3,5-Trimethylbenzene	108-67-8	16	0.10	4.1		0.91
06192	Vinyl Chloride	75-01-4	15	0.21	4.1		0.91
06192	m+p-Xylene	179601-23-1	34	0.17	4.1		0.91
06192	o-Xylene	95-47-6	16	0.17	4.1		0.91
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	120	5.1	15		22.56
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	624	18.8	37.6		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,600	19	190		1
04688	Acenaphthylene	208-96-8	1,600	19	190		1
04688	Aniline	62-53-3	840	190	560		1
04688	Anthracene	120-12-7	1,600	19	190		1
04688	Benzidine	92-87-5	2,200	J 1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,600	19	190		1
04688	Benzo(a)pyrene	50-32-8	1,400	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,300	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,300	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,600	19	190		1
04688	Benzoic acid	65-85-0	880	190	560		1
04688	Benzyl alcohol	100-51-6	1,700	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	1,500	19	190		1
04688	Butylbenzylphthalate	85-68-7	1,700	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,600	19	190		1
04688	Carbazole	86-74-8	1,600	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	1,600	38	190		1
04688	4-Chloroaniline	106-47-8	710	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,600	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,600	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,700	19	190		1
04688	2-Chloronaphthalene	91-58-7	1,600	19	190		1
04688	2-Chlorophenol	95-57-8	1,600	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,500	38	190		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Chrysene	218-01-9	1,600	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,400	19	190		1
04688	Dibenzofuran	132-64-9	1,600	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,500	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,500	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,500	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	610	110	380		1
04688	2,4-Dichlorophenol	120-83-2	1,700	19	190		1
04688	Diethylphthalate	84-66-2	1,600	19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,600	38	190		1
04688	3,5-Dimethylphenol	108-68-9	1,700	38	190		1
04688	Dimethylphthalate	131-11-3	1,600	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,200	190	560		1
04688	2,4-Dinitrophenol	51-28-5	1,400	J 750	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	1,600	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,500	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,700	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,700	19	380		1
04688	Fluoranthene	206-44-0	1,600	19	190		1
04688	Fluorene	86-73-7	1,600	19	190		1
04688	Hexachlorobenzene	118-74-1	1,500	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,400	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,300	190	560		1
04688	Hexachloroethane	67-72-1	1,400	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,400	19	190		1
04688	Isophorone	78-59-1	1,600	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,600	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,500	19	190		1
04688	2-Methylphenol	95-48-7	1,700	38	190		1
04688	4-Methylphenol	106-44-5	1,600	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,500	19	190		1
04688	2-Nitroaniline	88-74-4	1,600	19	190		1
04688	3-Nitroaniline	99-09-2	1,500	38	190		1
04688	4-Nitroaniline	100-01-6	1,200	75	190		1
04688	Nitrobenzene	98-95-3	1,600	19	190		1
04688	2-Nitrophenol	88-75-5	1,500	19	190		1
04688	4-Nitrophenol	100-02-7	1,500	190	560		1
04688	N-Nitrosodimethylamine	62-75-9	1,600	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,600	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,600	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,600	19	190		1
04688	Pentachlorophenol	87-86-5	1,100	190	560		1
04688	Phenanthrene	85-01-8	1,600	19	190		1
04688	Phenol	108-95-2	1,600	19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Pyrene	129-00-0	1,600	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,500	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	1,500	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	1,500	38	190		1

The following compounds were detected in the method blank at the respective concentrations of:

diethylphthalate 28 ug/kg

bis(2-ethylhexyl)phthalate 18 ug/kg

These blank values were not subtracted from the analytical results.

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	33	0.75	1.9		1
10138	Acenaphthylene	208-96-8	36	0.38	1.9		1
10138	Anthracene	120-12-7	36	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	35	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	34	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	39	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	19	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	36	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	39	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	39	6.8	20		1
10138	Chrysene	218-01-9	36	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	22	0.75	1.9		1
10138	Diethylphthalate	84-66-2	42	6.8	20		1
10138	Dimethylphthalate	131-11-3	38	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	43	6.8	20		1
10138	Fluoranthene	206-44-0	39	0.75	1.9		1
10138	Fluorene	86-73-7	36	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	21	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	33	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	31	0.75	1.9		1
10138	Naphthalene	91-20-3	31	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	30	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	43	6.8	20		1
10138	Phenanthrene	85-01-8	33	0.75	1.9		1
10138	Pyrene	129-00-0	33	0.75	1.9		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

GC Volatiles	TPH GRO	SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
	mod						
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	7.9	0.2	1.1		24.13

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	3,000	85	170	1000000 1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	3,000	56	170	0 1000000 1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110 U	110	340	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110 U	110	340	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	2,900	56	170	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	2,800	56	170	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	3,000	56	170	1000000 0	1
10132	HMX	2691-41-0	2,400	140	420	1000000 0	1
10132	Nitrobenzene	98-95-3	2,800	56	170	1000000 0	1
10132	Nitroglycerin	55-63-0	63,000	1,100	3,400	1000000 0	1
10132	2-Nitrotoluene	88-72-2	3,000	110	170	1000000 0	1
10132	3-Nitrotoluene	99-08-1	3,000	140	170	1000000 0	1
10132	4-Nitrotoluene	99-99-0	3,000	110	170	1000000 0	1
10132	PETN	78-11-5	73,000	1,100	3,400	1000000 0	1
10132	RDX	121-82-4	2,800	71	170	1000000 0	1
10132	Tetryl	479-45-8	3,800	86	170	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	3,300	56	170	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	3,000	56	170	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by 8315A	50-00-0	5,600	680	1,700		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	2.0 J	1.1	3.7		1
10225	PCB-1016	12674-11-2	21	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.59 U	0.59	1.9		1
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	6.8	0.37	1.9		1
10225	PCB-1260	11096-82-5	22	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous	SW-846 8015B		ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	2,400	110	560		1
10501	Isopropanol	67-63-0	2,400	110	560		1
10501	Methanol	67-56-1	2,400	110	560		1
Terphenyls	SW-846 8015B		mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 J	1.6	4.0		1
10318	o-Terphenyl	84-15-1	1.7 J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 J	1.7	4.0		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	26,200	5.57	22.1		1
07914	Boron	7440-42-8	212	0.985	5.53		1
01650	Calcium	7440-70-2	6,360	6.78	22.1		1
01654	Iron	7439-89-6	30,500	10.4	44.3		2
01656	Lithium	7439-93-2	134	0.24	2.2		1
01657	Magnesium	7439-95-4	6,550	2.81	11.1		1
06958	Manganese	7439-96-5	487	0.0863	0.553		1
10145	Phosphorus	7723-14-0	539	0.620	11.1		1
01662	Potassium	7440-09-7	4,740	19.9	55.3		1
01667	Sodium	7440-23-5	1,220	41.3	111		1
07968	Strontium	7440-24-6	138	0.0686	0.553		1
06969	Tin	7440-31-5	416	1.11	11.1		1
06970	Titanium	7440-32-6	1,750	0.841	2.21		2
10146	Zirconium	7440-67-7	108	0.929	5.53		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.05	0.0670	0.223		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	10.3	0.0670	0.447		2
06126	Barium	7440-39-3	140	0.121	0.447		2
06127	Beryllium	7440-41-7	1.92	0.0179	0.112		2
06128	Cadmium	7440-43-9	1.64	0.0402	0.112		2
06131	Chromium	7440-47-3	49.0	0.134	0.447		2
06132	Cobalt	7440-48-4	69.6	0.0223	0.112		2
06133	Copper	7440-50-8	23.1	0.0738	0.447		2
06135	Lead	7439-92-1	11.7	0.0116	0.223		2
06138	Molybdenum	7439-98-7	15.4	0.0559	0.112		2
06139	Nickel	7440-02-0	28.4	0.112	0.447		2
06141	Selenium	7782-49-2	2.84	0.0447	0.447		2
06142	Silver	7440-22-4	14.6	0.0134	0.112		2
06145	Thallium	7440-28-0	0.887	0.0335	0.112		2
06148	Vanadium	7440-62-2	85.5	0.0246	0.112		2
06149	Zinc	7440-66-6	98.2	0.626	3.35		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
00159	Mercury	7439-97-6	mg/kg	mg/kg	mg/kg	mg/kg	1
			0.177	0.0032	0.111		
Wet Chemistry							
11625	28a Moisture Content by 160.3	n.a.	%	%	%	%	1
			11.4	0.50	0.50		

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-006-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 05:26	Laura M Krieger	0.91
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 06:11	Laura M Krieger	0.93
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 04:25	Sara E Johnson	22.56
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:05	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:02	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	12/30/2010 21:38	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 01:24	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 21:04	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 18:20	Marie D John	24.13
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:54	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 03:12	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:27	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 03:43	Lindsey K Lafferty	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 22:23	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 08:03	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/22/2010 02:45	Tara L Snyder	2
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:45	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:36	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:36	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:36	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:51	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 9 of 9

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163874
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	20,900	5.51	21.9		1
07914	Boron	7440-42-8	6.58	0.975	5.48		1
01650	Calcium	7440-70-2	6,360	6.72	21.9		1
01654	Iron	7439-89-6	28,700	5.16	21.9		1
01656	Lithium	7439-93-2	24.9	0.24	2.2		1
01657	Magnesium	7439-95-4	5,900	2.78	11.0		1
06958	Manganese	7439-96-5	389	0.0855	0.548		1
10145	Phosphorus	7723-14-0	428	0.614	11.0		1
01662	Potassium	7440-09-7	3,270	19.7	54.8		1
01667	Sodium	7440-23-5	176	40.9	110		1
07968	Strontium	7440-24-6	29.4	0.0679	0.548		1
06969	Tin	7440-31-5	2.33 J	1.10	11.0		1
06970	Titanium	7440-32-6	1,390	0.833	2.19		2
10146	Zirconium	7440-67-7	4.57 J	0.920	5.48		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.165 J	0.0664	0.221		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.92	0.0664	0.443		2
06126	Barium	7440-39-3	139	0.120	0.443		2
06127	Beryllium	7440-41-7	0.961	0.0177	0.111		2
06128	Cadmium	7440-43-9	0.120	0.0398	0.111		2
06131	Chromium	7440-47-3	40.6	0.133	0.443		2
06132	Cobalt	7440-48-4	9.52	0.0221	0.111		2
06133	Copper	7440-50-8	12.9	0.0730	0.443		2
06135	Lead	7439-92-1	9.48	0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.646	0.0553	0.111		2
06139	Nickel	7440-02-0	18.5	0.111	0.443		2
06141	Selenium	7782-49-2	0.265 J	0.0443	0.443		2
06142	Silver	7440-22-4	0.0262 J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.366	0.0332	0.111		2
06148	Vanadium	7440-62-2	80.2	0.0243	0.111		2
06149	Zinc	7440-66-6	90.1	0.620	3.32		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.111		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.1	0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	11.6	0.90	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	33.9		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.36 J	0.23	1.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163874
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05895	21a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.55		1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	394	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	8.16	0.0100	0.0100		1
Wet Chemistry							
EPA 160.3 modified							
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50		1
11626	28a Moisture Content by 160.3	n.a.	11.7	0.50	0.50		1
The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:38	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:30	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163874
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0645 SDG#: DE037-03DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:30	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:30	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:49	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 14:16	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 14:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 01:31	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/03/2011 23:47	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102201A	12/27/2010 18:49	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102201A	12/27/2010 08:55	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	7 J	6	20		1
10904	Benzene	71-43-2	0.5 U	0.5	5		1
10904	Bromobenzene	108-86-1	1 U	1	5		1
10904	Bromochloromethane	74-97-5	1 U	1	5		1
10904	Bromodichloromethane	75-27-4	1 U	1	5		1
10904	Bromoform	75-25-2	1 U	1	5		1
10904	Bromomethane	74-83-9	1 U	1	5		1
10904	2-Butanone	78-93-3	3 U	3	10		1
10904	n-Butylbenzene	104-51-8	1 U	1	5		1
10904	sec-Butylbenzene	135-98-8	1 U	1	5		1
10904	tert-Butylbenzene	98-06-6	1 U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1 U	1	5		1
10904	Chlorobenzene	108-90-7	0.8 U	0.8	5		1
10904	Chloroethane	75-00-3	1 U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2 U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10904	Chloroform	67-66-3	0.8 U	0.8	5		1
10904	Chloromethane	74-87-3	1 U	1	5		1
10904	2-Chlorotoluene	95-49-8	1 U	1	5		1
10904	4-Chlorotoluene	106-43-4	1 U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2 U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2 U	2	5		1
10904	Dibromochloromethane	124-48-1	1 U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1 U	1	5		1
10904	Dibromomethane	74-95-3	1 U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2 U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1 U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1 U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8 U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8 U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8 U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1 U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1 U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1 U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1 U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1 U	1	5		1
10904	Ethylbenzene	100-41-4	0.8 U	0.8	5		1
10904	Freon 113	76-13-1	2 U	2	10		1
10904	Freon 133a	75-88-7	2 U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2 U	2	5		1
10904	2-Hexanone	591-78-6	3 U	3	10		1
10904	Isopropylbenzene	98-82-8	1 U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1 U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3 U	3	10		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2 U	2	5		1
10904	n-Propylbenzene	103-65-1	1 U	1	5		1
10904	Styrene	100-42-5	1 U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8 U	0.8	5		1
10904	Toluene	108-88-3	0.7 U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1 U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8 U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8 U	0.8	5		1
10904	Trichloroethene	79-01-6	1 U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2 U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1 U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5		1
10904	Vinyl Chloride	75-01-4	1 U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8 U	0.8	5		1
10904	o-Xylene	95-47-6	0.8 U	0.8	5		1
Preservation requirements were not met. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 4.							
GC/MS	Volatiles	SW-846 8260B SIM	ug/l	ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5 U	0.5	2.0		1
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1 U	1	5		1
04678	Benzidine	92-87-5	20 U	20	60		1
04678	Benzoic acid	65-85-0	6 U	6	15		1
04678	Benzyl alcohol	100-51-6	5 U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1 U	1	5		1
04678	Carbazole	86-74-8	1 U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1 U	1	5		1
04678	4-Chloroaniline	106-47-8	1 U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1 U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1 U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1 U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2 U	2	5		1
04678	2-Chlorophenol	95-57-8	1 U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2 U	2	5		1
04678	Dibenzofuran	132-64-9	1 U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2 U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1 U	1	5		1

*=This limit was used in the evaluation of the final result

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Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	2,4-Dimethylphenol	105-67-9	3 U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3 U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5 U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10 U	10	30		1
04678	2,4-Dinitrotoluene	121-14-2	1 U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1 U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1 U	1	5		1
04678	Hexachlorobenzene	118-74-1	1 U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1 U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5 U	5	15		1
04678	Hexachloroethane	67-72-1	1 U	1	5		1
04678	Isophorone	78-59-1	1 U	1	5		1
04678	2-Methylphenol	95-48-7	1 U	1	5		1
04678	4-Methylphenol	106-44-5	2 U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04678	2-Nitroaniline	88-74-4	1 U	1	5		1
04678	3-Nitroaniline	99-09-2	1 U	1	5		1
04678	4-Nitroaniline	100-01-6	1 U	1	5		1
04678	Nitrobenzene	98-95-3	1 U	1	5		1
04678	2-Nitrophenol	88-75-5	1 U	1	5		1
04678	4-Nitrophenol	100-02-7	10 U	10	30		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3 U	3	15		1
04678	Phenol	108-95-2	1 U	1	5		1
04678	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1 U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1 U	1	5		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010 U	0.010	0.050		1
10137	Acenaphthylene	208-96-8	0.010 U	0.010	0.050		1
10137	Anthracene	120-12-7	0.010 U	0.010	0.050		1
10137	Benzo(a)anthracene	56-55-3	0.010 U	0.010	0.050		1
10137	Benzo(a)pyrene	50-32-8	0.010 U	0.010	0.050		1
10137	Benzo(b)fluoranthene	205-99-2	0.010 U	0.010	0.050		1
10137	Benzo(g,h,i)perylene	191-24-2	0.010 U	0.010	0.050		1
10137	Benzo(k)fluoranthene	207-08-9	0.010 U	0.010	0.050		1
10137	Butylbenzylphthalate	85-68-7	0.093 J	0.050	1.0		1
10137	Di-n-butylphthalate	84-74-2	0.31 J	0.050	1.0		1
10137	Chrysene	218-01-9	0.010 U	0.010	0.050		1
10137	Dibenz(a,h)anthracene	53-70-3	0.010 U	0.010	0.050		1
10137	Diethylphthalate	84-66-2	0.11 J	0.050	1.0		1
10137	Dimethylphthalate	131-11-3	0.050 U	0.050	1.0		1

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Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	ug/l	
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.24 J	0.050	1.0		1
10137	Fluoranthene	206-44-0	0.010 U	0.010	0.050		1
10137	Fluorene	86-73-7	0.010 U	0.010	0.050		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010 U	0.010	0.050		1
10137	1-Methylnaphthalene	90-12-0	0.010 U	0.010	0.050		1
10137	2-Methylnaphthalene	91-57-6	0.010 U	0.010	0.050		1
10137	Naphthalene	91-20-3	0.033 J	0.010	0.050		1
10137	N-Nitrosodimethylamine	62-75-9	0.010 U	0.010	0.050		1
10137	Di-n-octylphthalate	117-84-0	0.082 J	0.050	1.0		1
10137	Phenanthrene	85-01-8	0.018 J	0.010	0.050		1
10137	Pyrene	129-00-0	0.010 U	0.010	0.050		1

The following compounds were detected in the method blank at the respective concentrations of:

diethylphthalate .063 ug/l
di-n-butylphthalate .13 ug/l
butylbenzylphthalate .076 ug/l
bis(2-ethylhexyl)phthalate .11 ug/l
di-n-octylphthalate .084 ug/l

These blank values were not subtracted from the analytical results.

Herbicides	SW-846 8151A	ug/l	ug/l	ug/l	ug/l
10407 2,4-D	94-75-7	0.18 U	0.18	0.56	1
10407 Dalapon	75-99-0	0.28 U	0.28	1.4	1
10407 2,4-DB	94-82-6	0.33 U	0.33	1.1	1
10407 Dicamba	1918-00-9	0.089 U	0.089	0.33	1
10407 Dinoseb	88-85-7	0.11 U	0.11	0.56	1
10407 2,4-DP (Dichlorprop)	120-36-5	0.18 U	0.18	0.56	1
10407 MCPA	94-74-6	330 U	330	1,100	1
10407 MCPP	93-65-2	56 U	56	220	1
10407 2,4,5-T	93-76-5	0.017 U	0.017	0.056	1
10407 2,4,5-TP	93-72-1	0.011 U	0.011	0.056	1

Pesticides/PCBs	SW-846 8081A	ug/l	ug/l	ug/l	ug/l
00177 Aldrin	309-00-2	0.0021 U	0.0021	0.010	1
00177 Alpha BHC	319-84-6	0.0031 U	0.0031	0.010	1
00177 Beta BHC	319-85-7	0.0030 U	0.0030	0.010	1
00177 Gamma BHC - Lindane	58-89-9	0.0021 U	0.0021	0.010	1
00177 Chlordane	57-74-9	0.13 U	0.13	0.52	1
00177 p,p-DDD	72-54-8	0.0052 U	0.0052	0.021	1
00177 p,p-DDE	72-55-9	0.0052 U	0.0052	0.021	1
00177 p,p-DDT	50-29-3	0.0052 U	0.0052	0.021	1
00177 Delta BHC	319-86-8	0.0030 U	0.0030	0.010	1
00177 Dieldrin	60-57-1	0.0056 U	0.0056	0.021	1
00177 Endosulfan I	959-98-8	0.0045 U	0.0045	0.010	1
00177 Endosulfan II	33213-65-9	0.016 U	0.016	0.021	1
00177 Endosulfan Sulfate	1031-07-8	0.0061 U	0.0061	0.021	1
00177 Endrin	72-20-8	0.0085 U	0.0085	0.021	1
00177 Endrin Aldehyde	7421-93-4	0.021 U	0.021	0.10	1
00177 Endrin Ketone	53494-70-5	0.0052 U	0.0052	0.021	1

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Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/l	ug/l	ug/l	ug/l	
00177	Heptachlor	76-44-8	0.0027 U	0.0027	0.010		1
00177	Heptachlor Epoxide	1024-57-3	0.0024 U	0.0024	0.010		1
00177	Methoxychlor	72-43-5	0.031 U	0.031	0.10		1
00177	Mirex	2385-85-5	0.089 U	0.089	0.26		1
00177	Toxaphene	8001-35-2	1.0 U	1.0	3.1		1
Pesticides/PCBs		SW-846 8082	ug/l	ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10 U	0.10	0.52		1
10227	Aroclor 5442	12642-23-8	0.10 U	0.10	0.52		1
10227	Aroclor 5460	11126-42-4	0.10 U	0.10	0.52		1
10227	PCB-1016	12674-11-2	0.10 U	0.10	0.52		1
10227	PCB-1221	11104-28-2	0.10 U	0.10	0.52		1
10227	PCB-1232	11141-16-5	0.21 U	0.21	0.52		1
10227	PCB-1242	53469-21-9	0.10 U	0.10	0.52		1
10227	PCB-1248	12672-29-6	0.10 U	0.10	0.52		1
10227	PCB-1254	11097-69-1	0.10 U	0.10	0.52		1
10227	PCB-1260	11096-82-5	0.10 U	0.10	0.52		1
10227	PCB-1262	37324-23-5	0.21 U	0.21	0.52		1
10227	PCB-1268	11100-14-4	0.17 U	0.17	0.52		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
		SW-846 6020	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000099 J	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1

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Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/l	mg/l	mg/l	mg/l	
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
		SW-846 7470A	mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
		EPA 314.0	ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
		SW-846 7199	ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1
		EPA 150.1	Std. Units	Std. Units	Std. Units	Std. Units	
00200	22b pH by 9040B	n.a.	5.2	0.010	0.010		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y103512AA	12/18/2010 00:05	Frank A Valla, Jr	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103491AA	12/15/2010 10:47	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103491AA	12/15/2010 10:47	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y103512AA	12/18/2010 00:05	Frank A Valla, Jr	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10350WAB026	12/31/2010 22:37	Ryan P Byrne	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10349WAI026	12/22/2010 22:23	Gregory J Drahovsky	1
00813	BNA Water Extraction	SW-846 3510C	1	10350WAB026	12/16/2010 14:50	Timothy J Attenberger	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

EB-15 SDG#: DE037-04EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10466	BNA Water Extraction SIM	SW-846 3510C	1	10349WAI026	12/16/2010 09:30	Olivia Arosemena	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103490003A	12/17/2010 21:06	John W Perkins	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103500016A	12/24/2010 11:15	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103500017A	12/22/2010 09:23	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103500017A	12/16/2010 21:25	Karen L Beyer	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103500016A	12/16/2010 21:25	Karen L Beyer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103490003A	12/15/2010 12:30	Kelli M Barto	1
01743	Aluminum	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
08014	Boron	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
01754	Iron	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
01756	Lithium	SW-846 6010B	1	103551848003	12/23/2010 16:59	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103551848003	12/23/2010 16:59	John P Hook	1
07058	Manganese	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
01762	Potassium	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
01767	Sodium	SW-846 6010B	1	103551848003	12/23/2010 16:59	John P Hook	1
08068	Strontium	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
07069	Tin	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
07070	Titanium	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
10144	Zirconium	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
06024	Antimony	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103556050002D	12/23/2010 20:18	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103556050002C	12/23/2010 20:18	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103556050002B	12/23/2010 20:18	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103545713001	12/21/2010 06:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103551848003	12/22/2010 09:26	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103556050002	12/22/2010 08:48	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103545713001	12/20/2010 13:45	Damary Valentin	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10350196902A	12/17/2010 07:44	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10352658701A	12/18/2010 14:59	Venia B McFadden	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10348113001A	12/14/2010 11:57	Nicole M Kepley	1
00200	22b pH by 9040B	EPA 150.1	1	10351020001A	12/17/2010 19:45	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.7 U	6.7	8.0		0.92
06192	Benzene	71-43-2	0.10 U	0.10	4.0		0.92
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.0		0.92
06192	Bromochloromethane	74-97-5	0.33 U	0.33	4.0		0.92
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.0		0.92
06192	Bromoform	75-25-2	0.40 U	0.40	4.0		0.92
06192	Bromomethane	74-83-9	0.25 U	0.25	4.0		0.92
06192	2-Butanone	78-93-3	1.2 U	1.2	8.0		0.92
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.0		0.92
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.0		0.92
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.0		0.92
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.0		0.92
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.0		0.92
06192	Chloroethane	75-00-3	0.13 U	0.13	4.0		0.92
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30 U	0.30	4.0		0.92
06192	Chloroform	67-66-3	0.14 J	0.12	4.0		0.92
06192	Chloromethane	74-87-3	0.33 U	0.33	4.0		0.92
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.0		0.92
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.0		0.92
06192	Chlorotrifluoroethene	79-38-9	0.50 U	0.50	5.0		0.92
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.70 U	0.70	4.0		0.92
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	4.0		0.92
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	4.0		0.92
06192	Dibromomethane	74-95-3	0.24 U	0.24	4.0		0.92
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.0		0.92
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.0		0.92
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.0		0.92
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.0		0.92
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.0		0.92
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.0		0.92
06192	1,1-Dichloroethene	75-35-4	0.39 U	0.39	4.0		0.92
06192	cis-1,2-Dichloroethene	156-59-2	0.19 U	0.19	4.0		0.92
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.0		0.92
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	4.0		0.92
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.0		0.92
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	4.0		0.92
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.0		0.92
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.0		0.92
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	4.0		0.92
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.0		0.92
06192	Freon 113	76-13-1	0.11 U	0.11	4.0		0.92
06192	Freon 133a	75-88-7	0.50 U	0.50	5.0		0.92
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.0		0.92
06192	2-Hexanone	591-78-6	1.6 U	1.6	8.0		0.92
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.0		0.92
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.0		0.92
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	4.0		0.92
06192	4-Methyl-2-pentanone	108-10-1	0.39 U	0.39	8.0		0.92
06192	Methylene Chloride	75-09-2	2.5 J	0.24	4.0		0.92
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.0		0.92

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.0		0.92
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.0		0.92
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23 U	0.23	4.0		0.92
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	4.0		0.92
06192	Toluene	108-88-3	0.08 U	0.08	4.0		0.92
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.0		0.92
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	4.0		0.92
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	4.0		0.92
06192	1,1,2-Trichloroethane	79-00-5	0.27 U	0.27	4.0		0.92
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.0		0.92
06192	Trichlorofluoromethane	75-69-4	0.29 U	0.29	4.0		0.92
06192	1,2,3-Trichloropropane	96-18-4	0.33 U	0.33	4.0		0.92
06192	1,2,4-Trimethylbenzene	95-63-6	0.40 U	0.40	4.0		0.92
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.0		0.92
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	4.0		0.92
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	4.0		0.92
06192	o-Xylene	95-47-6	0.17 U	0.17	4.0		0.92
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.3 U	5.3	16		24.32
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	143	36.3	72.5		2
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	360		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U 0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U 0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U 0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	20		1
10138	Chrysene	218-01-9	0.36	U 0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U 6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U 6.5	20		1
10138	Fluoranthene	206-44-0	0.73	U 0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U 0.73	1.8		1

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Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20		1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1		22.77
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	82 U	82	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	54 U	54	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110 U	110	330	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110 U	110	330	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	54 U	54	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	54 U	54	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	54 U	54	160	10000000	1
10132	HMX	2691-41-0	140 U	140	410	10000000	1
10132	Nitrobenzene	98-95-3	54 U	54	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100 U	1,100	3,300	10000000	1
10132	2-Nitrotoluene	88-72-2	110 U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	140 U	140	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110 U	110	160	10000000	1
10132	PETN	78-11-5	1,100 U	1,100	3,300	10000000	1
10132	RDX	121-82-4	68 U	68	160	10000000	1
10132	Tetryl	479-45-8	83 U	83	160	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	54 U	54	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	54 U	54	160	10000000	1

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Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A	ug/kg	ug/kg	ug/kg	ug/kg	
		50-00-0	650 U	650	1,600		1
Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.9 J	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.8		1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8		1
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.8		1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8		1
10225	PCB-1248	12672-29-6	5.1	0.36	1.8		1
10225	PCB-1254	11097-69-1	2.8	0.36	1.8		1
10225	PCB-1260	11096-82-5	0.71 J	0.36	1.8		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.8		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.8		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous							
		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	540		1
10501	Isopropanol	67-63-0	110 U	110	540		1
10501	Methanol	67-56-1	110 U	110	540		1
Terphenyls							
		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.8		1
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,200	5.37	21.3		1
07914	Boron	7440-42-8	4.96 J	0.949	5.33		1
01650	Calcium	7440-70-2	5,190	6.54	21.3		1
01654	Iron	7439-89-6	20,800	5.02	21.3		1
01656	Lithium	7439-93-2	19.4	0.23	2.1		1
01657	Magnesium	7439-95-4	4,250	2.71	10.7		1
06958	Manganese	7439-96-5	262	0.0832	0.533		1
10145	Phosphorus	7723-14-0	430	0.597	10.7		1
01662	Potassium	7440-09-7	2,790	19.2	53.3		1
01667	Sodium	7440-23-5	201	39.8	107		1
07968	Strontium	7440-24-6	25.0	0.0661	0.533		1
06969	Tin	7440-31-5	2.45 J	1.07	10.7		1
06970	Titanium	7440-32-6	1,230	0.811	2.13		2
10146	Zirconium	7440-67-7	1.20 J	0.896	5.33		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.156 J	0.0646	0.215		2

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SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.80	0.0646	0.431		2
06126	Barium	7440-39-3	138	0.116	0.431		2
06127	Beryllium	7440-41-7	0.657	0.0172	0.108		2
06128	Cadmium	7440-43-9	0.0887 J	0.0388	0.108		2
06131	Chromium	7440-47-3	24.3	0.129	0.431		2
06132	Cobalt	7440-48-4	7.35	0.0215	0.108		2
06133	Copper	7440-50-8	11.4	0.0711	0.431		2
06135	Lead	7439-92-1	6.51	0.0112	0.215		2
06138	Molybdenum	7439-98-7	0.684	0.0539	0.108		2
06139	Nickel	7440-02-0	12.0	0.108	0.431		2
06141	Selenium	7782-49-2	0.141 J	0.0431	0.431		2
06142	Silver	7440-22-4	0.0301 J	0.0129	0.108		2
06145	Thallium	7440-28-0	0.380	0.0323	0.108		2
06148	Vanadium	7440-62-2	57.3	0.0237	0.108		2
06149	Zinc	7440-66-6	94.7	0.603	3.23		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.108		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.8	0.87	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	8.0	0.87	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.6		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.55		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	398	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.48	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.1	0.50	0.50		1

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SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	%	
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-007-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 06:33	Laura M Krieger	0.92
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 05:05	Sara E Johnson	24.32
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:11	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:07	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 16:12	Timothy J Trees	2
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 02:40	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 22:45	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 18:57	Marie D John	22.77
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:53	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 03:54	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:37	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 04:02	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1

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SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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S0745 SDG#: DE037-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103500005A	12/17/2010 19:47	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 14:02	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103500005A	12/16/2010 14:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:00	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:54	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:36	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:54	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:54	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:53	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 15:13	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 15:13	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 03:08	Venia B McFadden	1

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Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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Submitted: 12/14/2010 10:05

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S0745 SDG#: DE037-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 00:11	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:10	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.4 U	7.4	8.8		1
06192	Benzene	71-43-2	0.11 U	0.11	4.4		1
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.4		1
06192	Bromochloromethane	74-97-5	0.36 U	0.36	4.4		1
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.4		1
06192	Bromoform	75-25-2	0.44 U	0.44	4.4		1
06192	Bromomethane	74-83-9	0.28 U	0.28	4.4		1
06192	2-Butanone	78-93-3	1.3 U	1.3	8.8		1
06192	n-Butylbenzene	104-51-8	0.13 U	0.13	4.4		1
06192	sec-Butylbenzene	135-98-8	0.07 U	0.07	4.4		1
06192	tert-Butylbenzene	98-06-6	0.18 U	0.18	4.4		1
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.4		1
06192	Chlorobenzene	108-90-7	0.12 U	0.12	4.4		1
06192	Chloroethane	75-00-3	0.14 U	0.14	4.4		1
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.33 U	0.33	4.4		1
06192	Chloroform	67-66-3	0.13 U	0.13	4.4		1
06192	Chloromethane	74-87-3	0.36 U	0.36	4.4		1
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.4		1
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.4		1
06192	Chlorotrifluoroethene	79-38-9	0.55 U	0.55	5.5		1
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.77 U	0.77	4.4		1
06192	Dibromochloromethane	124-48-1	0.22 U	0.22	4.4		1
06192	1,2-Dibromoethane	106-93-4	0.19 U	0.19	4.4		1
06192	Dibromomethane	74-95-3	0.26 U	0.26	4.4		1
06192	1,2-Dichlorobenzene	95-50-1	0.1 U	0.1	4.4		1
06192	1,3-Dichlorobenzene	541-73-1	0.13 U	0.13	4.4		1
06192	1,4-Dichlorobenzene	106-46-7	0.18 U	0.18	4.4		1
06192	Dichlorodifluoromethane	75-71-8	0.13 U	0.13	4.4		1
06192	1,1-Dichloroethane	75-34-3	0.11 U	0.11	4.4		1
06192	1,2-Dichloroethane	107-06-2	0.17 U	0.17	4.4		1
06192	1,1-Dichloroethene	75-35-4	0.43 U	0.43	4.4		1
06192	cis-1,2-Dichloroethene	156-59-2	0.21 U	0.21	4.4		1
06192	trans-1,2-Dichloroethene	156-60-5	0.13 U	0.13	4.4		1
06192	1,2-Dichloropropane	78-87-5	0.19 U	0.19	4.4		1
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.4		1
06192	2,2-Dichloropropane	594-20-7	0.19 U	0.19	4.4		1
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.4		1
06192	cis-1,3-Dichloropropene	10061-01-5	0.18 U	0.18	4.4		1
06192	trans-1,3-Dichloropropene	10061-02-6	0.19 U	0.19	4.4		1
06192	Ethylbenzene	100-41-4	0.07 U	0.07	4.4		1
06192	Freon 113	76-13-1	0.12 U	0.12	4.4		1
06192	Freon 133a	75-88-7	0.55 U	0.55	5.5		1
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.4		1
06192	2-Hexanone	591-78-6	1.8 U	1.8	8.8		1
06192	Isopropylbenzene	98-82-8	0.07 U	0.07	4.4		1
06192	p-Isopropyltoluene	99-87-6	0.12 U	0.12	4.4		1
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.23 U	0.23	4.4		1
06192	4-Methyl-2-pentanone	108-10-1	0.43 U	0.43	8.8		1
06192	Methylene Chloride	75-09-2	1.4 J	0.26	4.4		1
06192	n-Propylbenzene	103-65-1	0.08 U	0.08	4.4		1

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Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.11 U	0.11	4.4		1
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12 U	0.12	4.4		1
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.25 U	0.25	4.4		1
06192	Tetrachloroethene	127-18-4	0.22 U	0.22	4.4		1
06192	Toluene	108-88-3	0.09 U	0.09	4.4		1
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.4		1
06192	1,2,4-Trichlorobenzene	120-82-1	0.20 U	0.20	4.4		1
06192	1,1,1-Trichloroethane	71-55-6	0.22 U	0.22	4.4		1
06192	1,1,2-Trichloroethane	79-00-5	0.30 U	0.30	4.4		1
06192	Trichloroethene	79-01-6	0.17 U	0.17	4.4		1
06192	Trichlorofluoromethane	75-69-4	0.32 U	0.32	4.4		1
06192	1,2,3-Trichloropropane	96-18-4	0.36 U	0.36	4.4		1
06192	1,2,4-Trimethylbenzene	95-63-6	0.44 U	0.44	4.4		1
06192	1,3,5-Trimethylbenzene	108-67-8	0.11 U	0.11	4.4		1
06192	Vinyl Chloride	75-01-4	0.22 U	0.22	4.4		1
06192	m+p-Xylene	179601-23-1	0.19 U	0.19	4.4		1
06192	o-Xylene	95-47-6	0.19 U	0.19	4.4		1
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.0 U	5.0	15		22.85
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	105	36.7	73.4		2
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200		1

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Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	370		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.8		1
10138	Anthracene	120-12-7	0.37	U 0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	2.7	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	2.0	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	3.2	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.3	J 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.5	J 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U 6.6	20		1
10138	Di-n-butylphthalate	84-74-2	12	J 6.6	20		1
10138	Chrysene	218-01-9	3.0	0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U 6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U 6.6	20		1
10138	Fluoranthene	206-44-0	4.3	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.98	J 0.73	1.8		1

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Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6 U	6.6	20		1
10138	Phenanthrene	85-01-8	1.1 J	0.73	1.8		1
10138	Pyrene	129-00-0	3.6	0.73	1.8		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.1		23.85
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	83	U 83	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	55	U 55	170	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U 110	330	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U 110	330	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	55	U 55	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	55	U 55	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	55	U 55	170	10000000	1
10132	HMX	2691-41-0	140	U 140	410	10000000	1
10132	Nitrobenzene	98-95-3	55	U 55	170	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U 1,100	3,300	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U 110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U 140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U 110	170	10000000	1
10132	PETN	78-11-5	1,100	U 1,100	3,300	10000000	1
10132	RDX	121-82-4	69	U 69	170	10000000	1
10132	Tetryl	479-45-8	84	U 84	170	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	55	U 55	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	55	U 55	170	10000000	1

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Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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Chantilly VA 20151

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S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A 50-00-0	ug/kg 3,000	ug/kg 660	ug/kg 1,700	ug/kg	1
Pesticides/PCBs							
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6	ug/kg	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.55 U	0.55	1.9		1
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.9		1
10225	PCB-1242	53469-21-9	0.55 U	0.55	1.9		1
10225	PCB-1248	12672-29-6	1.4 J	0.36	1.9		1
10225	PCB-1254	11097-69-1	1.1 J	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.88 J	0.36	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous							
10501	Ethanol	64-17-5	110 U	110	550	ug/kg	1
10501	Isopropanol	67-63-0	110 U	110	550		1
10501	Methanol	67-56-1	140 J	110	550		1
Terphenyls							
10318	m-Terphenyl	92-06-8	1.7 U	1.7	3.9	mg/kg	1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	3.9		1
Metals							
01643	Aluminum	7429-90-5	16,600	5.43	21.6	mg/kg	1
07914	Boron	7440-42-8	5.74	0.961	5.40		1
01650	Calcium	7440-70-2	3,910	6.62	21.6		1
01654	Iron	7439-89-6	19,900	5.09	21.6		1
01656	Lithium	7439-93-2	19.5	0.24	2.2		1
01657	Magnesium	7439-95-4	3,980	2.74	10.8		1
06958	Manganese	7439-96-5	251	0.0842	0.540		1
10145	Phosphorus	7723-14-0	310	0.605	10.8		1
01662	Potassium	7440-09-7	2,560	19.4	54.0		1
01667	Sodium	7440-23-5	175	40.3	108		1
07968	Strontium	7440-24-6	22.7	0.0669	0.540		1
06969	Tin	7440-31-5	2.43 J	1.08	10.8		1
06970	Titanium	7440-32-6	1,210	0.821	2.16		2
10146	Zirconium	7440-67-7	2.75 J	0.907	5.40		1
SW-846 6020							
06124	Antimony	7440-36-0	0.132 J	0.0642	0.214	mg/kg	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.29	0.0642	0.428		2
06126	Barium	7440-39-3	132	0.115	0.428		2
06127	Beryllium	7440-41-7	0.814	0.0171	0.107		2
06128	Cadmium	7440-43-9	0.128	0.0385	0.107		2
06131	Chromium	7440-47-3	28.0	0.128	0.428		2
06132	Cobalt	7440-48-4	7.08	0.0214	0.107		2
06133	Copper	7440-50-8	10.8	0.0706	0.428		2
06135	Lead	7439-92-1	7.95	0.0111	0.214		2
06138	Molybdenum	7439-98-7	1.16	0.0535	0.107		2
06139	Nickel	7440-02-0	14.5	0.107	0.428		2
06141	Selenium	7782-49-2	0.185 J	0.0428	0.428		2
06142	Silver	7440-22-4	0.0588 J	0.0128	0.107		2
06145	Thallium	7440-28-0	0.379	0.0321	0.107		2
06148	Vanadium	7440-62-2	52.7	0.0235	0.107		2
06149	Zinc	7440-66-6	90.9	0.599	3.21		2
SW-846 7471A							
00159	Mercury	7439-97-6	0.0043 J	0.0031	0.108		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.9	0.88	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2 J	0.88	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	33.0		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.55		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	395	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.44	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	9.2	0.50	0.50		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	EPA 160.3 modified	%	%	%	%	%	
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-007-SA5C-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 06:55	Laura M Krieger	1
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 05:24	Sara E Johnson	22.85
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:16	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:13	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 16:29	Timothy J Trees	2
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 03:05	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 04:16	Linda M Hartenstine	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 19:33	Marie D John	23.85
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:52	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 06:01	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:46	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 04:21	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0791 SDG#: DE037-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 22:37	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 17:01	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:03	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:57	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:38	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:57	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:57	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:54	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 15:28	Ashley M Adams	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0791 SDG#: DE037-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 15:28	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 03:32	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 00:27	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:12	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S7505 SDG#: DE037-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U 180	530		1
04688	Benzyl alcohol	100-51-6	180	U 180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180		1
04688	4-Chloroaniline	106-47-8	71	U 71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530		1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	35	U 35	180		1
04688	4-Methylphenol	106-44-5	35	U 35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	35	U 35	180		1
04688	4-Nitroaniline	100-01-6	71	U 71	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	530		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S7505 SDG#: DE037-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.8		1
10138	Anthracene	120-12-7	0.49	J 0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	4.9	0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	5.6	0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	10	0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	4.2	0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	4.1	0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4	U 6.4	19		1
10138	Di-n-butylphthalate	84-74-2	8.2	J 6.4	19		1
10138	Chrysene	218-01-9	8.7	0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.78	J 0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J 6.4	19		1
10138	Fluoranthene	206-44-0	12	0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U 0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.5	0.71	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.71	U 0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71	U 0.71	1.8		1
10138	Naphthalene	91-20-3	0.71	U 0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U 0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U 6.4	19		1
10138	Phenanthrene	85-01-8	4.3	0.71	1.8		1
10138	Pyrene	129-00-0	9.8	0.71	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	3.8
10401	Dalapon	75-99-0	4.7	U 4.7	9.6
10401	2,4-DB	94-82-6	6.8	U 6.8	6.8
10401	Dicamba	1918-00-9	0.94	J 0.43	1.3
10401	Dinoseb	88-85-7	0.85	U 0.85	2.6
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U 0.85	1.8
10401	MCPA	94-74-6	81	U 81	270
10401	MCPP (Mecoprop)	93-65-2	280	80	270
10401	2,4,5-T	93-76-5	0.087	U 0.087	0.18
10401	2,4,5-TP	93-72-1	0.080	U 0.080	0.18

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S7505 SDG#: DE037-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported.							
When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18		1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18		1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6		1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36		1
01363	p,p-DDE	72-55-9	0.070 U	0.070	0.36		1
01363	p,p-DDT	50-29-3	0.070 U	0.070	0.36		1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18		1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36		1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36		1
01363	Endrin	72-20-8	0.070 U	0.070	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36		1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36		1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.036 U	0.036	0.18		1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8		1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36		1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0		1
The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	2.9 J	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8		1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8		1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8		1
10225	PCB-1248	12672-29-6	2.6	0.35	1.8		1
10225	PCB-1254	11097-69-1	5.1	0.35	1.8		1
10225	PCB-1260	11096-82-5	3.5	0.35	1.8		1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S7505 SDG#: DE037-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,600	5.30	21.1		1
07914	Boron	7440-42-8	3.61 J	0.938	5.27		1
01650	Calcium	7440-70-2	3,640	6.46	21.1		1
01654	Iron	7439-89-6	24,500	4.97	21.1		1
01656	Lithium	7439-93-2	26.6	0.23	2.1		1
01657	Magnesium	7439-95-4	5,230	2.68	10.5		1
06958	Manganese	7439-96-5	337	0.0822	0.527		1
10145	Phosphorus	7723-14-0	509	0.590	10.5		1
01662	Potassium	7440-09-7	3,410	19.0	52.7		1
01667	Sodium	7440-23-5	119	39.3	105		1
07968	Strontium	7440-24-6	18.5	0.0654	0.527		1
06969	Tin	7440-31-5	2.61 J	1.05	10.5		1
06970	Titanium	7440-32-6	1,330	0.801	2.11		2
10146	Zirconium	7440-67-7	2.25 J	0.886	5.27		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.193 J	0.0626	0.209		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.68	0.0626	0.418		2
06126	Barium	7440-39-3	151	0.113	0.418		2
06127	Beryllium	7440-41-7	0.777	0.0167	0.104		2
06128	Cadmium	7440-43-9	0.173	0.0376	0.104		2
06131	Chromium	7440-47-3	28.5	0.125	0.418		2
06132	Cobalt	7440-48-4	8.89	0.0209	0.104		2
06133	Copper	7440-50-8	15.1	0.0689	0.418		2
06135	Lead	7439-92-1	10.0	0.0109	0.209		2
06138	Molybdenum	7439-98-7	0.843	0.0522	0.104		2
06139	Nickel	7440-02-0	16.9	0.104	0.418		2
06141	Selenium	7782-49-2	0.199 J	0.0418	0.418		2
06142	Silver	7440-22-4	0.173	0.0125	0.104		2
06145	Thallium	7440-28-0	0.378	0.0313	0.104		2
06148	Vanadium	7440-62-2	52.3	0.0230	0.104		2
06149	Zinc	7440-66-6	127	0.585	3.13		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.105		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.7	0.85	1.1		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	31.9		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S7505 SDG#: DE037-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05892	3a Cr VI by EPA 7199	18540-29-9	0.46 J	0.21	1.1	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	425	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	7.77	0.0100	0.0100	Std. Units	1
Wet Chemistry							
EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	6.1	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 03:31	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 04:51	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 01:42	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 01:23	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 04:39	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S7505 SDG#: DE037-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:14	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:00	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:40	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:00	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:00	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:55	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 15:42	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 03:56	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/04/2011 00:51	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0705 SDG#: DE037-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	72	U 72	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	72	U 72	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0705 SDG#: DE037-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72 U	0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36 U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.7 J	0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.8 J	0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	3.8	0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.3 J	0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.4 J	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5 U	6.5	19		1
10138	Di-n-butylphthalate	84-74-2	6.5 U	6.5	19		1
10138	Chrysene	218-01-9	3.1	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	19		1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.0 J	6.5	19		1
10138	Fluoranthene	206-44-0	3.7	0.72	1.8		1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.2 J	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	19		1
10138	Phenanthrene	85-01-8	1.4 J	0.72	1.8		1
10138	Pyrene	129-00-0	3.0	0.72	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3 U	1.3	3.9
10401	Dalapon	75-99-0	4.7 U	4.7	9.7
10401	2,4-DB	94-82-6	6.9 U	6.9	6.9
10401	Dicamba	1918-00-9	0.43 U	0.43	1.3
10401	Dinoseb	88-85-7	0.86 U	0.86	2.6
10401	2,4-DP (Dichlorprop)	120-36-5	1.7 U	1.7	1.8
10401	MCPA	94-74-6	520 U	520	520
10401	MCPP (Mecoprop)	93-65-2	230 U	230	270
10401	2,4,5-T	93-76-5	0.088 U	0.088	0.18
10401	2,4,5-TP	93-72-1	0.081 U	0.081	0.18

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold

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Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0705 SDG#: DE037-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and MCPA. Due to interfering peaks on the chromatogram, the values reported for 2,4-DP and 2,4-DB represent the lowest reporting limits attainable.							
Perchlorate							
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007 14797-73-0	ug/kg 2.3 U	ug/kg 2.3	ug/kg 5.4	ug/kg	1
Pesticides/PCBs							
01363	Aldrin	SW-846 8081A 309-00-2	ug/kg 0.071 U	ug/kg 0.071	ug/kg 0.18	ug/kg	1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18		1
01363	Beta BHC	319-85-7	0.63	0.065	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.037 U	0.037	0.18		1
01363	Chlordane	57-74-9	0.86 U	0.86	3.7		1
01363	p,p-DDD	72-54-8	2.6 U	2.6	2.6		1
01363	p,p-DDE	72-55-9	0.071 U	0.071	0.37		1
01363	p,p-DDT	50-29-3	2.1 U	2.1	2.1		1
01363	Delta BHC	319-86-8	0.31	0.039	0.18		1
01363	Dieldrin	60-57-1	0.68 U	0.68	0.68		1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.62 U	0.62	0.62		1
01363	Endosulfan Sulfate	1031-07-8	0.071 U	0.071	0.37		1
01363	Endrin	72-20-8	0.071 U	0.071	0.37		1
01363	Endrin Aldehyde	7421-93-4	0.46 U	0.46	0.46		1
01363	Endrin Ketone	53494-70-5	0.071 U	0.071	0.37		1
01363	Heptachlor	76-44-8	0.065 U	0.065	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.20 U	0.20	0.20		1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8		1
01363	Mirex	2385-85-5	0.39 U	0.39	0.39		1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.1		1
The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs							
10225	Aroclor 5432	SW-846 8082 63496-31-1	ug/kg 1.1 U	ug/kg 1.1	ug/kg 3.6	ug/kg	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.3 J	1.1	3.6		1

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SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

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Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0705 SDG#: DE037-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.8		1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8		1
10225	PCB-1232	11141-16-5	0.56 U	0.56	1.8		1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.8		1
10225	PCB-1254	11097-69-1	2.4	0.36	1.8		1
10225	PCB-1260	11096-82-5	1.4 J	0.36	1.8		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.8		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.8		1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,300	5.31	21.1		1
07914	Boron	7440-42-8	2.83 J	0.939	5.28		1
01650	Calcium	7440-70-2	3,660	6.47	21.1		1
01654	Iron	7439-89-6	25,000	4.97	21.1		1
01656	Lithium	7439-93-2	34.4	0.23	2.1		1
01657	Magnesium	7439-95-4	5,490	2.68	10.6		1
06958	Manganese	7439-96-5	298	0.0823	0.528		1
10145	Phosphorus	7723-14-0	517	0.591	10.6		1
01662	Potassium	7440-09-7	2,400	19.0	52.8		1
01667	Sodium	7440-23-5	90.4 J	39.4	106		1
07968	Strontium	7440-24-6	17.6	0.0654	0.528		1
06969	Tin	7440-31-5	2.62 J	1.06	10.6		1
06970	Titanium	7440-32-6	1,370	0.802	2.11		2
10146	Zirconium	7440-67-7	1.35 J	0.886	5.28		1

		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.215	0.0633	0.211		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.71	0.0633	0.422		2
06126	Barium	7440-39-3	97.9	0.114	0.422		2
06127	Beryllium	7440-41-7	0.636	0.0169	0.106		2
06128	Cadmium	7440-43-9	0.130	0.0380	0.106		2
06131	Chromium	7440-47-3	24.4	0.127	0.422		2
06132	Cobalt	7440-48-4	6.67	0.0211	0.106		2
06133	Copper	7440-50-8	12.4	0.0697	0.422		2
06135	Lead	7439-92-1	6.50	0.0110	0.211		2
06138	Molybdenum	7439-98-7	0.538	0.0528	0.106		2
06139	Nickel	7440-02-0	15.7	0.106	0.422		2
06141	Selenium	7782-49-2	0.0944 J	0.0422	0.422		2
06142	Silver	7440-22-4	0.0576 J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.332	0.0317	0.106		2
06148	Vanadium	7440-62-2	45.2	0.0232	0.106		2
06149	Zinc	7440-66-6	84.3	0.591	3.17		2

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Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
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SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
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S0705 SDG#: DE037-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
00159	Mercury	SW-846 7471A 7439-97-6	mg/kg 0.0036 J	mg/kg 0.0029	mg/kg 0.102	mg/kg	1
Wet Chemistry							
07332	11a Anions by 300.0 - Fluoride	EPA 300.0 16984-48-8	mg/kg 2.5	mg/kg 0.86	mg/kg 1.1	mg/kg	1
10147	7a Perchlorate EPA 314.0	EPA 314.0 14797-73-0	ug/kg 9.7 U	ug/kg 9.7	ug/kg 32.3	ug/kg	1
05892	3a Cr VI by EPA 7199	SW-846 7199 18540-29-9	mg/kg 0.22 U	mg/kg 0.22	mg/kg 1.1	mg/kg	1
01821	Oxidation Reduction Potential	ASTM D1498 n.a.	mV 411	mV 10.0	mV 10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
00394	22a pH by 9045C	SW-846 9045C modified n.a.	Std. Units 7.37	Std. Units 0.0100	Std. Units 0.0100	Std. Units	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified n.a.	% 7.1	% 0.50	% 0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 03:56	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 05:23	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 03:05	John W Perkins	1

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Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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S0705 SDG#: DE037-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103490017A	12/20/2010 17:44	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 01:37	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 04:58	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103490017A	12/16/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:17	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:03	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:45	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:03	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:03	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:58	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1

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Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
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SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
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S0705 SDG#: DE037-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 16:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 04:44	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 00:59	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	9.2 U	9.2	11		1.29
06192	Benzene	71-43-2	0.14 U	0.14	5.5		1.29
06192	Bromobenzene	108-86-1	0.18 U	0.18	5.5		1.29
06192	Bromochloromethane	74-97-5	0.46 U	0.46	5.5		1.29
06192	Bromodichloromethane	75-27-4	0.11 U	0.11	5.5		1.29
06192	Bromoform	75-25-2	0.55 U	0.55	5.5		1.29
06192	Bromomethane	74-83-9	0.35 U	0.35	5.5		1.29
06192	2-Butanone	78-93-3	1.7 U	1.7	11		1.29
06192	n-Butylbenzene	104-51-8	0.17 U	0.17	5.5		1.29
06192	sec-Butylbenzene	135-98-8	0.08 U	0.08	5.5		1.29
06192	tert-Butylbenzene	98-06-6	0.22 U	0.22	5.5		1.29
06192	Carbon Tetrachloride	56-23-5	0.19 U	0.19	5.5		1.29
06192	Chlorobenzene	108-90-7	0.15 U	0.15	5.5		1.29
06192	Chloroethane	75-00-3	0.18 U	0.18	5.5		1.29
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.41 U	0.41	5.5		1.29
06192	Chloroform	67-66-3	0.17 U	0.17	5.5		1.29
06192	Chloromethane	74-87-3	0.46 U	0.46	5.5		1.29
06192	2-Chlorotoluene	95-49-8	0.19 U	0.19	5.5		1.29
06192	4-Chlorotoluene	106-43-4	0.19 U	0.19	5.5		1.29
06192	Chlorotrifluoroethene	79-38-9	0.69 U	0.69	6.9		1.29
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.97 U	0.97	5.5		1.29
06192	Dibromochloromethane	124-48-1	0.28 U	0.28	5.5		1.29
06192	1,2-Dibromoethane	106-93-4	0.23 U	0.23	5.5		1.29
06192	Dibromomethane	74-95-3	0.33 U	0.33	5.5		1.29
06192	1,2-Dichlorobenzene	95-50-1	0.12 U	0.12	5.5		1.29
06192	1,3-Dichlorobenzene	541-73-1	0.17 U	0.17	5.5		1.29
06192	1,4-Dichlorobenzene	106-46-7	0.22 U	0.22	5.5		1.29
06192	Dichlorodifluoromethane	75-71-8	0.17 U	0.17	5.5		1.29
06192	1,1-Dichloroethane	75-34-3	0.14 U	0.14	5.5		1.29
06192	1,2-Dichloroethane	107-06-2	0.21 U	0.21	5.5		1.29
06192	1,1-Dichloroethene	75-35-4	0.54 U	0.54	5.5		1.29
06192	cis-1,2-Dichloroethene	156-59-2	0.26 U	0.26	5.5		1.29
06192	trans-1,2-Dichloroethene	156-60-5	0.17 U	0.17	5.5		1.29
06192	1,2-Dichloropropane	78-87-5	0.23 U	0.23	5.5		1.29
06192	1,3-Dichloropropane	142-28-9	0.11 U	0.11	5.5		1.29
06192	2,2-Dichloropropane	594-20-7	0.23 U	0.23	5.5		1.29
06192	1,1-Dichloropropene	563-58-6	0.18 U	0.18	5.5		1.29
06192	cis-1,3-Dichloropropene	10061-01-5	0.22 U	0.22	5.5		1.29
06192	trans-1,3-Dichloropropene	10061-02-6	0.23 U	0.23	5.5		1.29
06192	Ethylbenzene	100-41-4	0.08 U	0.08	5.5		1.29
06192	Freon 113	76-13-1	0.15 U	0.15	5.5		1.29
06192	Freon 133a	75-88-7	0.69 U	0.69	6.9		1.29
06192	Hexachlorobutadiene	87-68-3	0.19 U	0.19	5.5		1.29
06192	2-Hexanone	591-78-6	2.2 U	2.2	11		1.29
06192	Isopropylbenzene	98-82-8	0.08 U	0.08	5.5		1.29
06192	p-Isopropyltoluene	99-87-6	0.15 U	0.15	5.5		1.29
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.29 U	0.29	5.5		1.29
06192	4-Methyl-2-pentanone	108-10-1	0.54 U	0.54	11		1.29
06192	Methylene Chloride	75-09-2	1.5 J	0.33	5.5		1.29
06192	n-Propylbenzene	103-65-1	0.1 U	0.1	5.5		1.29

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Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.14 U	0.14	5.5		1.29
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.15 U	0.15	5.5		1.29
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.32 U	0.32	5.5		1.29
06192	Tetrachloroethene	127-18-4	0.28 U	0.28	5.5		1.29
06192	Toluene	108-88-3	0.11 U	0.11	5.5		1.29
06192	1,2,3-Trichlorobenzene	87-61-6	0.19 U	0.19	5.5		1.29
06192	1,2,4-Trichlorobenzene	120-82-1	0.25 U	0.25	5.5		1.29
06192	1,1,1-Trichloroethane	71-55-6	0.28 U	0.28	5.5		1.29
06192	1,1,2-Trichloroethane	79-00-5	0.37 U	0.37	5.5		1.29
06192	Trichloroethene	79-01-6	0.21 U	0.21	5.5		1.29
06192	Trichlorofluoromethane	75-69-4	0.40 U	0.40	5.5		1.29
06192	1,2,3-Trichloropropane	96-18-4	0.46 U	0.46	5.5		1.29
06192	1,2,4-Trimethylbenzene	95-63-6	0.55 U	0.55	5.5		1.29
06192	1,3,5-Trimethylbenzene	108-67-8	0.14 U	0.14	5.5		1.29
06192	Vinyl Chloride	75-01-4	0.28 U	0.28	5.5		1.29
06192	m+p-Xylene	179601-23-1	0.23 U	0.23	5.5		1.29
06192	o-Xylene	95-47-6	0.23 U	0.23	5.5		1.29
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	6.6 U	6.6	20		31.02
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	108 J	89.3	179		5
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180 U	180	540		1
04688	Benzidine	92-87-5	1,300 U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180 U	180	540		1
04688	Benzyl alcohol	100-51-6	180 U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18 U	18	180		1
04688	Carbazole	86-74-8	18 U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36 U	36	180		1
04688	4-Chloroaniline	106-47-8	71 U	71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18 U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18 U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18 U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18 U	18	180		1
04688	2-Chlorophenol	95-57-8	18 U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36 U	36	180		1
04688	Dibenzofuran	132-64-9	18 U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18 U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18 U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18 U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110 U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18 U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36 U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36 U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180 U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	710 U	710	2,100		1

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Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	71	U 71	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.0	J 0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.6	J 0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	3.8	0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	2.4	0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.1	J 0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	14	J 6.4	19		1
10138	Di-n-butylphthalate	84-74-2	9.0	J 6.4	19		1
10138	Chrysene	218-01-9	2.8	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U 0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	44	6.4	19		1
10138	Fluoranthene	206-44-0	2.7	0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U 0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.99	J 0.71	1.8		1

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Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8		1
10138	Naphthalene	91-20-3	0.71 U	0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19		1
10138	Phenanthrene	85-01-8	1.3 J	0.71	1.8		1
10138	Pyrene	129-00-0	2.1	0.71	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	2.6 U	2.6	13		305.62
Reporting limits were raised due to sample foaming.							

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	80 U	80	160	1000000 1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	54 U	54	160	1000000 1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110 U	110	320	1000000 1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110 U	110	320	1000000 1
10132	1,3-Dinitrobenzene	99-65-0	54 U	54	160	1000000 1
10132	2,4-Dinitrotoluene	121-14-2	54 U	54	160	1000000 1
10132	2,6-Dinitrotoluene	606-20-2	54 U	54	160	1000000 1
10132	HMX	2691-41-0	130 U	130	400	1000000 1
10132	Nitrobenzene	98-95-3	54 U	54	160	1000000 1
10132	Nitroglycerin	55-63-0	1,100 U	1,100	3,200	1000000 1
10132	2-Nitrotoluene	88-72-2	110 U	110	160	1000000 1
10132	3-Nitrotoluene	99-08-1	130 U	130	160	1000000 1
10132	4-Nitrotoluene	99-99-0	110 U	110	160	1000000 1
10132	PETN	78-11-5	1,100 U	1,100	3,200	1000000 1
10132	RDX	121-82-4	67 U	67	160	1000000 1
10132	Tetryl	479-45-8	82 U	82	160	1000000 1

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SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	54	U 54	160	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	54	U 54	160	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U 1.3	3.9		1
10401	Dalapon	75-99-0	4.7	U 4.7	9.6		1
10401	2,4-DB	94-82-6	1.6	J 0.66	1.8		1
10401	Dicamba	1918-00-9	0.43	U 0.43	1.3		1
10401	Dinoseb	88-85-7	0.86	U 0.86	2.6		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86	U 0.86	1.8		1
10401	MCPA	94-74-6	200	J 81	270		1
10401	MCPP (Mecoprop)	93-65-2	130	J 80	270		1
10401	2,4,5-T	93-76-5	0.093	U 0.093	0.18		1
10401	2,4,5-TP	93-72-1	0.080	U 0.080	0.18		1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4,5-T.							
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by 8315A	50-00-0	640	U 640	1,600		1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.071	U 0.071	0.18		1
01363	Alpha BHC	319-84-6	0.036	U 0.036	0.18		1
01363	Beta BHC	319-85-7	0.064	U 0.064	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.056	U 0.056	0.18		1
01363	Chlordane	57-74-9	0.86	U 0.86	3.6		1
01363	p,p-DDD	72-54-8	1.1	U 1.1	1.1		1
01363	p,p-DDE	72-55-9	1.7	U 1.7	1.7		1
01363	p,p-DDT	50-29-3	1.6	U 1.6	1.6		1
01363	Delta BHC	319-86-8	0.039	U 0.039	0.18		1
01363	Dieldrin	60-57-1	0.61	U 0.61	0.61		1
01363	Endosulfan I	959-98-8	0.047	U 0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.16	U 0.16	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.071	U 0.071	0.36		1
01363	Endrin	72-20-8	0.071	U 0.071	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.46	U 0.46	0.46		1

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Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Endrin Ketone	53494-70-5	0.071 U	0.071	0.36		1
01363	Heptachlor	76-44-8	0.16 U	0.16	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.29 U	0.29	0.29		1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8		1
01363	Mirex	2385-85-5	0.16 U	0.16	0.36		1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.1		1

The surrogate TCX recovery in the LCS is outside the QC limits.

Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	5.4 U	5.4	18	5
10225	Aroclor 5442	12642-23-8	5.4 U	5.4	18	5
10225	Aroclor 5460	11126-42-4	9.7 J	5.4	18	5
10225	PCB-1016	12674-11-2	1.8 U	1.8	9.1	5
10225	PCB-1221	11104-28-2	2.7 U	2.7	9.1	5
10225	PCB-1232	11141-16-5	2.8 U	2.8	9.1	5
10225	PCB-1242	53469-21-9	2.7 U	2.7	9.1	5
10225	PCB-1248	12672-29-6	1.8 U	1.8	9.1	5
10225	PCB-1254	11097-69-1	73	1.8	9.1	5
10225	PCB-1260	11096-82-5	1.8 U	1.8	9.1	5
10225	PCB-1262	37324-23-5	1.8 U	1.8	9.1	5
10225	PCB-1268	11100-14-4	1.8 U	1.8	9.1	5

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg
10501	Ethanol	64-17-5	110 U	110	540	1
10501	Isopropanol	67-63-0	110 U	110	540	1
10501	Methanol	67-56-1	110 U	110	540	1

Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.8	1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.8	1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.8	1

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg
01643	Aluminum	7429-90-5	24,900	5.29	21.0	1
07914	Boron	7440-42-8	7.47	0.935	5.25	1
01650	Calcium	7440-70-2	23,100	6.44	21.0	1
01654	Iron	7439-89-6	24,800	4.95	21.0	1
01656	Lithium	7439-93-2	22.0	0.23	2.1	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	4,880	2.67	10.5		1
06958	Manganese	7439-96-5	356	0.0820	0.525		1
10145	Phosphorus	7723-14-0	422	0.588	10.5		1
01662	Potassium	7440-09-7	3,390	18.9	52.5		1
01667	Sodium	7440-23-5	259	39.2	105		1
07968	Strontium	7440-24-6	96.6	0.0651	0.525		1
06969	Tin	7440-31-5	2.65 J	1.05	10.5		1
06970	Titanium	7440-32-6	1,310	0.799	2.10		2
10146	Zirconium	7440-67-7	6.16	0.883	5.25		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.470	0.0618	0.206		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.71	0.0618	0.412		2
06126	Barium	7440-39-3	179	0.111	0.412		2
06127	Beryllium	7440-41-7	0.865	0.0165	0.103		2
06128	Cadmium	7440-43-9	0.490	0.0371	0.103		2
06131	Chromium	7440-47-3	53.6	0.124	0.412		2
06132	Cobalt	7440-48-4	9.05	0.0206	0.103		2
06133	Copper	7440-50-8	17.1	0.0680	0.412		2
06135	Lead	7439-92-1	13.3	0.0107	0.206		2
06138	Molybdenum	7439-98-7	10.7	0.0515	0.103		2
06139	Nickel	7440-02-0	22.8	0.103	0.412		2
06141	Selenium	7782-49-2	0.237 J	0.0412	0.412		2
06142	Silver	7440-22-4	0.0715 J	0.0124	0.103		2
06145	Thallium	7440-28-0	0.364	0.0309	0.103		2
06148	Vanadium	7440-62-2	59.0	0.0227	0.103		2
06149	Zinc	7440-66-6	147	0.577	3.09		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.161	0.0030	0.106		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.5	0.86	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.98 J	0.86	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.2		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.66 J	0.21	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.53		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	397	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.67	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 07:18	Laura M Krieger	1.29
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 05:44	Sara E Johnson	31.02
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:21	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:18	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/06/2011 09:49	Timothy J Trees	5
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 04:21	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 05:55	Linda M Hartenstine	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 20:20	Marie D John	305.62

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Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

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Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8505 SDG#: DE037-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:50	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 06:44	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:56	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 03:33	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 02:05	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 05:16	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103510008A	12/17/2010 22:57	Dustin A Underkoffler	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550026A	12/23/2010 08:47	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103510008A	12/17/2010 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:21	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:06	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

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Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8505 SDG#: DE037-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:06	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:00	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 16:39	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 16:39	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 05:08	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/04/2011 01:23	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:13	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8705 SDG#: DE037-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	360		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1

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Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8705 SDG#: DE037-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	3.4	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	2.8	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	4.8	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.8	J 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.4	J 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	14	J 6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U 6.6	20		1
10138	Chrysene	218-01-9	3.2	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U 6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U 6.6	20		1
10138	Fluoranthene	206-44-0	4.0	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.91	J 0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U 0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U 0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U 0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U 0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6	U 6.6	20		1
10138	Phenanthrene	85-01-8	0.73	U 0.73	1.8		1
10138	Pyrene	129-00-0	3.6	0.73	1.8		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U 1.3	3.9		1
10401	Dalapon	75-99-0	4.8	U 4.8	9.8		1
10401	2,4-DB	94-82-6	2.9	0.68	1.9		1
10401	Dicamba	1918-00-9	0.54	J 0.44	1.3		1
10401	Dinoseb	88-85-7	0.87	U 0.87	2.6		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U 0.87	1.9		1
10401	MCPA	94-74-6	400	U 400	400		1
10401	MCPP (Mecoprop)	93-65-2	82	U 82	270		1
10401	2,4,5-T	93-76-5	0.090	U 0.090	0.19		1
10401	2,4,5-TP	93-72-1	0.082	U 0.082	0.19		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is

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Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8705 SDG#: DE037-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPA.						
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.072 U	0.072	0.18		1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18		1
01363	Beta BHC	319-85-7	0.066 U	0.066	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.056 U	0.056	0.18		1
01363	Chlordane	57-74-9	5.0 U	5.0	5.0		1
01363	p,p-DDD	72-54-8	1.5 U	1.5	1.5		1
01363	p,p-DDE	72-55-9	1.4 U	1.4	1.4		1
01363	p,p-DDT	50-29-3	2.1 U	2.1	2.1		1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18		1
01363	Dieldrin	60-57-1	0.64 U	0.64	0.64		1
01363	Endosulfan I	959-98-8	0.048 U	0.048	0.18		1
01363	Endosulfan II	33213-65-9	0.13 U	0.13	0.37		1
01363	Endosulfan Sulfate	1031-07-8	0.072 U	0.072	0.37		1
01363	Endrin	72-20-8	0.072 U	0.072	0.37		1
01363	Endrin Aldehyde	7421-93-4	0.44 U	0.44	0.44		1
01363	Endrin Ketone	53494-70-5	0.072 U	0.072	0.37		1
01363	Heptachlor	76-44-8	0.21 U	0.21	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.37 U	0.37	1.8		10
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8		1
01363	Mirex	2385-85-5	0.072 U	0.072	0.37		1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.2		1
	The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. Due to interfering peaks on the chromatogram, the values reported for heptachlor epoxide represent the lowest reporting limits attainable.						
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.2 U	2.2	7.2		2
10225	Aroclor 5442	12642-23-8	2.2 U	2.2	7.2		2
10225	Aroclor 5460	11126-42-4	5.1 J	2.2	7.2		2
10225	PCB-1016	12674-11-2	0.72 U	0.72	3.7		2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.7		2
10225	PCB-1232	11141-16-5	1.1 U	1.1	3.7		2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.7		2
10225	PCB-1248	12672-29-6	40	0.72	3.7		2
10225	PCB-1254	11097-69-1	16	0.72	3.7		2

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Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8705 SDG#: DE037-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1260	11096-82-5	11	0.72	3.7		2
10225	PCB-1262	37324-23-5	0.72 U	0.72	3.7		2
10225	PCB-1268	11100-14-4	0.72 U	0.72	3.7		2
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,800	5.39	21.4		1
07914	Boron	7440-42-8	5.31 J	0.954	5.36		1
01650	Calcium	7440-70-2	18,800	6.57	21.4		1
01654	Iron	7439-89-6	25,400	5.05	21.4		1
01656	Lithium	7439-93-2	24.1	0.24	2.1		1
01657	Magnesium	7439-95-4	5,190	2.72	10.7		1
06958	Manganese	7439-96-5	311	0.0836	0.536		1
10145	Phosphorus	7723-14-0	451	0.600	10.7		1
01662	Potassium	7440-09-7	3,220	19.3	53.6		1
01667	Sodium	7440-23-5	186	40.0	107		1
07968	Strontium	7440-24-6	58.7	0.0664	0.536		1
06969	Tin	7440-31-5	2.61 J	1.07	10.7		1
06970	Titanium	7440-32-6	1,360	0.814	2.14		2
10146	Zirconium	7440-67-7	3.44 J	0.900	5.36		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.405	0.0637	0.212		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.58	0.0637	0.424		2
06126	Barium	7440-39-3	143	0.115	0.424		2
06127	Beryllium	7440-41-7	0.733	0.0170	0.106		2
06128	Cadmium	7440-43-9	0.282	0.0382	0.106		2
06131	Chromium	7440-47-3	30.1	0.127	0.424		2
06132	Cobalt	7440-48-4	7.58	0.0212	0.106		2
06133	Copper	7440-50-8	14.8	0.0700	0.424		2
06135	Lead	7439-92-1	10.9	0.0110	0.212		2
06138	Molybdenum	7439-98-7	1.19	0.0531	0.106		2
06139	Nickel	7440-02-0	19.7	0.106	0.424		2
06141	Selenium	7782-49-2	0.136 J	0.0424	0.424		2
06142	Silver	7440-22-4	0.841	0.0127	0.106		2
06145	Thallium	7440-28-0	0.303	0.0318	0.106		2
06148	Vanadium	7440-62-2	54.1	0.0233	0.106		2
06149	Zinc	7440-66-6	133	0.594	3.18		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0304 J	0.0031	0.107		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.87 U	0.87	1.1		1

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Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8705 SDG#: DE037-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.8		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.50 J	0.22	1.1		1
ASTM D1498			mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	388	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.70	0.0100	0.0100		1
Wet Chemistry EPA 160.3 modified			%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.5	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 04:46	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 06:29	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 04:01	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 02:19	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 02:33	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 06:49	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1

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SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
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Submitted: 12/14/2010 10:05

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S8705 SDG#: DE037-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:24	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:09	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:49	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:09	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:09	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:01	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 16:53	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 05:32	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 01:31	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S8705 SDG#: DE037-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9505 SDG#: DE037-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U 180	530		1
04688	Benzyl alcohol	100-51-6	180	U 180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180		1
04688	4-Chloroaniline	106-47-8	70	U 70	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530		1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	35	U 35	180		1
04688	4-Methylphenol	106-44-5	35	U 35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	35	U 35	180		1
04688	4-Nitroaniline	100-01-6	70	U 70	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	530		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9505 SDG#: DE037-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70	U 0.70	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.8		1
10138	Anthracene	120-12-7	0.35	U 0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	2.2	0.70	1.8		1
10138	Benzo(a)pyrene	50-32-8	3.0	0.70	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	5.6	0.70	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.9	0.70	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.9	0.70	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.3	U 6.3	19		1
10138	Di-n-butylphthalate	84-74-2	6.3	U 6.3	19		1
10138	Chrysene	218-01-9	3.4	0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U 0.70	1.8		1
10138	Diethylphthalate	84-66-2	6.3	U 6.3	19		1
10138	Dimethylphthalate	131-11-3	6.3	U 6.3	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J 6.3	19		1
10138	Fluoranthene	206-44-0	3.2	0.70	1.8		1
10138	Fluorene	86-73-7	0.70	U 0.70	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.4	J 0.70	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.70	U 0.70	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.70	U 0.70	1.8		1
10138	Naphthalene	91-20-3	0.70	U 0.70	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U 0.70	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.3	U 6.3	19		1
10138	Phenanthrene	85-01-8	1.2	J 0.70	1.8		1
10138	Pyrene	129-00-0	2.9	0.70	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	3.8
10401	Dalapon	75-99-0	4.6	U 4.6	9.5
10401	2,4-DB	94-82-6	3.9	0.65	1.8
10401	Dicamba	1918-00-9	0.55	J 0.42	1.3
10401	Dinoseb	88-85-7	0.84	U 0.84	2.5
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U 0.84	1.8
10401	MCPA	94-74-6	530	80	260
10401	MCPP (Mecoprop)	93-65-2	79	U 79	260
10401	2,4,5-T	93-76-5	0.086	U 0.086	0.18
10401	2,4,5-TP	93-72-1	0.079	U 0.079	0.18

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9505 SDG#: DE037-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported.							
Pesticides/PCBs							
		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17		1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.17		1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17		1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.17		1
01363	Chlordane	57-74-9	0.84 U	0.84	3.6		1
01363	p,p-DDD	72-54-8	0.20 U	0.20	0.36		1
01363	p,p-DDE	72-55-9	0.069 U	0.069	0.36		1
01363	p,p-DDT	50-29-3	0.23 U	0.23	0.36		1
01363	Delta BHC	319-86-8	0.12 J	0.038	0.17		1
01363	Dieldrin	60-57-1	0.069 U	0.069	0.36		1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17		1
01363	Endosulfan II	33213-65-9	0.069 U	0.069	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.36		1
01363	Endrin	72-20-8	0.069 U	0.069	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.069 U	0.069	0.36		1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.36		1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17		1
01363	Heptachlor Epoxide	1024-57-3	0.036 U	0.036	0.17		1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.7		1
01363	Mirex	2385-85-5	0.069 U	0.069	0.36		1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9		1

The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.1 U	2.1	6.9		2
10225	Aroclor 5442	12642-23-8	2.1 U	2.1	6.9		2
10225	Aroclor 5460	11126-42-4	37	2.1	6.9		2
10225	PCB-1016	12674-11-2	0.69 U	0.69	3.6		2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.6		2
10225	PCB-1232	11141-16-5	1.1 U	1.1	3.6		2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.6		2
10225	PCB-1248	12672-29-6	0.69 U	0.69	3.6		2
10225	PCB-1254	11097-69-1	9.2	0.69	3.6		2
10225	PCB-1260	11096-82-5	5.2	0.69	3.6		2
10225	PCB-1262	37324-23-5	0.69 U	0.69	3.6		2
10225	PCB-1268	11100-14-4	0.69 U	0.69	3.6		2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9505 SDG#: DE037-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,600	5.24	20.8		1
07914	Boron	7440-42-8	4.36 J	0.928	5.21		1
01650	Calcium	7440-70-2	6,280	6.39	20.8		1
01654	Iron	7439-89-6	21,900	4.91	20.8		1
01656	Lithium	7439-93-2	19.3	0.23	2.1		1
01657	Magnesium	7439-95-4	4,420	2.65	10.4		1
06958	Manganese	7439-96-5	314	0.0813	0.521		1
10145	Phosphorus	7723-14-0	441	0.584	10.4		1
01662	Potassium	7440-09-7	3,440	18.8	52.1		1
01667	Sodium	7440-23-5	106	38.9	104		1
07968	Strontium	7440-24-6	28.4	0.0646	0.521		1
06969	Tin	7440-31-5	1.04 U	1.04	10.4		1
06970	Titanium	7440-32-6	1,080	0.792	2.08		2
10146	Zirconium	7440-67-7	1.88 J	0.875	5.21		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.330	0.0607	0.202		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.12	0.0607	0.405		2
06126	Barium	7440-39-3	162	0.109	0.405		2
06127	Beryllium	7440-41-7	0.736	0.0162	0.101		2
06128	Cadmium	7440-43-9	0.278	0.0364	0.101		2
06131	Chromium	7440-47-3	27.3	0.121	0.405		2
06132	Cobalt	7440-48-4	7.66	0.0202	0.101		2
06133	Copper	7440-50-8	14.9	0.0668	0.405		2
06135	Lead	7439-92-1	10.9	0.0105	0.202		2
06138	Molybdenum	7439-98-7	1.17	0.0506	0.101		2
06139	Nickel	7440-02-0	17.1	0.101	0.405		2
06141	Selenium	7782-49-2	0.159 J	0.0405	0.405		2
06142	Silver	7440-22-4	0.0526 J	0.0121	0.101		2
06145	Thallium	7440-28-0	0.348	0.0304	0.101		2
06148	Vanadium	7440-62-2	51.8	0.0223	0.101		2
06149	Zinc	7440-66-6	126	0.567	3.04		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.146	0.0029	0.102		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.3	0.84	1.1		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.6		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.52 J	0.21	1.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9505 SDG#: DE037-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	393	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.14	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 05:11	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 07:05	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 04:28	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 02:47	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 07:08	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9505 SDG#: DE037-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:28	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:02	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 17:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 05:56	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/04/2011 01:55	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9105 SDG#: DE037-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1

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Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9105 SDG#: DE037-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.1	J 0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.6	J 0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	3.4	U 0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.5	J 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	20		1
10138	Chrysene	218-01-9	2.8	U 0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U 6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U 6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	25	U 6.5	20		1
10138	Fluoranthene	206-44-0	1.8	U 0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U 0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U 0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U 0.73	1.8		1
10138	Naphthalene	91-20-3	0.74	J 0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U 0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U 6.5	20		1
10138	Phenanthrene	85-01-8	1.1	J 0.73	1.8		1
10138	Pyrene	129-00-0	2.0	U 0.73	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	3.9
10401	Dalapon	75-99-0	4.8	U 4.8	9.8
10401	2,4-DB	94-82-6	0.67	U 0.67	1.8
10401	Dicamba	1918-00-9	0.44	U 0.44	1.3
10401	Dinoseb	88-85-7	0.87	U 0.87	2.6
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U 0.87	1.8
10401	MCPA	94-74-6	120	U 120	270
10401	MCPP (Mecoprop)	93-65-2	230	U 230	270
10401	2,4,5-T	93-76-5	0.089	U 0.089	0.18
10401	2,4,5-TP	93-72-1	0.082	U 0.082	0.18

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9105 SDG#: DE037-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported.							
When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and MCPA.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.072 U	0.072	0.18		1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18		1
01363	Beta BHC	319-85-7	0.065 U	0.065	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.037 U	0.037	0.18		1
01363	Chlordane	57-74-9	0.87 U	0.87	3.7		1
01363	p,p-DDD	72-54-8	0.072 U	0.072	0.37		1
01363	p,p-DDE	72-55-9	0.072 U	0.072	0.37		1
01363	p,p-DDT	50-29-3	0.50 U	0.50	0.50		1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18		1
01363	Dieldrin	60-57-1	0.079 U	0.079	0.37		1
01363	Endosulfan I	959-98-8	0.048 U	0.048	0.18		1
01363	Endosulfan II	33213-65-9	0.13 U	0.13	0.37		1
01363	Endosulfan Sulfate	1031-07-8	0.072 U	0.072	0.37		1
01363	Endrin	72-20-8	0.53	0.072	0.37		1
01363	Endrin Aldehyde	7421-93-4	0.20 U	0.20	0.37		1
01363	Endrin Ketone	53494-70-5	0.072 U	0.072	0.37		1
01363	Heptachlor	76-44-8	0.065 U	0.065	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.19 U	0.19	0.19		1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8		1
01363	Mirex	2385-85-5	0.12 U	0.12	0.37		1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.2		1
The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.2 U	2.2	7.2		2
10225	Aroclor 5442	12642-23-8	2.2 U	2.2	7.2		2
10225	Aroclor 5460	11126-42-4	2.8 J	2.2	7.2		2
10225	PCB-1016	12674-11-2	0.72 U	0.72	3.7		2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.7		2
10225	PCB-1232	11141-16-5	1.1 U	1.1	3.7		2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.7		2
10225	PCB-1248	12672-29-6	0.72 U	0.72	3.7		2
10225	PCB-1254	11097-69-1	38	0.72	3.7		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9105 SDG#: DE037-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1260	11096-82-5	0.72 U	0.72	3.7		2
10225	PCB-1262	37324-23-5	0.72 U	0.72	3.7		2
10225	PCB-1268	11100-14-4	0.72 U	0.72	3.7		2
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	21,900	5.26	20.9		1
07914	Boron	7440-42-8	7.01	0.931	5.23		1
01650	Calcium	7440-70-2	15,700	6.41	20.9		1
01654	Iron	7439-89-6	29,400	9.86	41.9		2
01656	Lithium	7439-93-2	31.8	0.23	2.1		1
01657	Magnesium	7439-95-4	7,030	2.66	10.5		1
06958	Manganese	7439-96-5	350	0.0816	0.523		1
10145	Phosphorus	7723-14-0	518	0.586	10.5		1
01662	Potassium	7440-09-7	4,880	18.8	52.3		1
01667	Sodium	7440-23-5	204	39.0	105		1
07968	Strontium	7440-24-6	43.1	0.0649	0.523		1
06969	Tin	7440-31-5	2.86 J	1.05	10.5		1
06970	Titanium	7440-32-6	1,560	0.795	2.09		2
10146	Zirconium	7440-67-7	3.18 J	0.879	5.23		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.437	0.0634	0.211		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	10.8	0.0634	0.423		2
06126	Barium	7440-39-3	175	0.114	0.423		2
06127	Beryllium	7440-41-7	1.01	0.0169	0.106		2
06128	Cadmium	7440-43-9	0.271	0.0380	0.106		2
06131	Chromium	7440-47-3	50.2	0.127	0.423		2
06132	Cobalt	7440-48-4	12.3	0.0211	0.106		2
06133	Copper	7440-50-8	19.2	0.0697	0.423		2
06135	Lead	7439-92-1	15.2	0.0110	0.211		2
06138	Molybdenum	7439-98-7	1.31	0.0528	0.106		2
06139	Nickel	7440-02-0	25.9	0.106	0.423		2
06141	Selenium	7782-49-2	0.334 J	0.0423	0.423		2
06142	Silver	7440-22-4	0.0585 J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.531	0.0317	0.106		2
06148	Vanadium	7440-62-2	93.5	0.0232	0.106		2
06149	Zinc	7440-66-6	182	0.592	3.17		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0218 J	0.0030	0.105		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.0	0.87	1.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9105 SDG#: DE037-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.6		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.47 J	0.22	1.1		1
ASTM D1498			mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	398	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.37	0.0100	0.0100		1
Wet Chemistry EPA 160.3 modified			%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.1	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 05:36	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 07:39	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 04:56	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 03:01	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 07:26	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9105 SDG#: DE037-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/22/2010 03:32	Tara L Snyder	2
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:32	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:52	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:03	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 17:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 06:20	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/04/2011 02:11	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S9105 SDG#: DE037-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.7 U	6.7	8.0		0.93
06192	Benzene	71-43-2	0.10 U	0.10	4.0		0.93
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.0		0.93
06192	Bromochloromethane	74-97-5	0.33 U	0.33	4.0		0.93
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.0		0.93
06192	Bromoform	75-25-2	0.40 U	0.40	4.0		0.93
06192	Bromomethane	74-83-9	0.25 U	0.25	4.0		0.93
06192	2-Butanone	78-93-3	1.2 U	1.2	8.0		0.93
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.0		0.93
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.0		0.93
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.0		0.93
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.0		0.93
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.0		0.93
06192	Chloroethane	75-00-3	0.13 U	0.13	4.0		0.93
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30 U	0.30	4.0		0.93
06192	Chloroform	67-66-3	0.13 J	0.12	4.0		0.93
06192	Chloromethane	74-87-3	0.33 U	0.33	4.0		0.93
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.0		0.93
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.0		0.93
06192	Chlorotrifluoroethene	79-38-9	0.50 U	0.50	5.0		0.93
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.70 U	0.70	4.0		0.93
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	4.0		0.93
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	4.0		0.93
06192	Dibromomethane	74-95-3	0.24 U	0.24	4.0		0.93
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.0		0.93
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.0		0.93
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.0		0.93
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.0		0.93
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.0		0.93
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.0		0.93
06192	1,1-Dichloroethene	75-35-4	0.39 U	0.39	4.0		0.93
06192	cis-1,2-Dichloroethene	156-59-2	0.19 U	0.19	4.0		0.93
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.0		0.93
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	4.0		0.93
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.0		0.93
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	4.0		0.93
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.0		0.93
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.0		0.93
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	4.0		0.93
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.0		0.93
06192	Freon 113	76-13-1	0.11 U	0.11	4.0		0.93
06192	Freon 133a	75-88-7	0.50 U	0.50	5.0		0.93
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.0		0.93
06192	2-Hexanone	591-78-6	1.6 U	1.6	8.0		0.93
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.0		0.93
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.0		0.93
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	4.0		0.93
06192	4-Methyl-2-pentanone	108-10-1	0.39 U	0.39	8.0		0.93
06192	Methylene Chloride	75-09-2	2.4 J	0.24	4.0		0.93
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.0		0.93

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.0		0.93
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.0		0.93
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23 U	0.23	4.0		0.93
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	4.0		0.93
06192	Toluene	108-88-3	0.08 U	0.08	4.0		0.93
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.0		0.93
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	4.0		0.93
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	4.0		0.93
06192	1,1,2-Trichloroethane	79-00-5	0.27 U	0.27	4.0		0.93
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.0		0.93
06192	Trichlorofluoromethane	75-69-4	0.29 U	0.29	4.0		0.93
06192	1,2,3-Trichloropropane	96-18-4	0.33 U	0.33	4.0		0.93
06192	1,2,4-Trimethylbenzene	95-63-6	0.40 U	0.40	4.0		0.93
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.0		0.93
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	4.0		0.93
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	4.0		0.93
06192	o-Xylene	95-47-6	0.17 U	0.17	4.0		0.93
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.9 U	4.9	15		22.69
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	93.9	35.9	71.8		2
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	72	U 72	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,200		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	360		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	72	U 72	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U 0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.3	J 0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.8	0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	2.9	0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.90	J 0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	J 0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	19		1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	19		1
10138	Chrysene	218-01-9	4.0	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U 0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U 6.5	19		1
10138	Dimethylphthalate	131-11-3	6.5	U 6.5	19		1
10138	Fluoranthene	206-44-0	1.7	J 0.72	1.8		1
10138	Fluorene	86-73-7	0.72	U 0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U 0.72	1.8		1

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Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	19		1
10138	Phenanthrene	85-01-8	0.72 U	0.72	1.8		1
10138	Pyrene	129-00-0	2.4	0.72	1.8		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.2		27.29
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	81	U 81	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	54	U 54	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U 110	320	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U 110	320	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	54	U 54	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	54	U 54	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	54	U 54	160	10000000	1
10132	HMX	2691-41-0	130	U 130	400	10000000	1
10132	Nitrobenzene	98-95-3	54	U 54	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U 1,100	3,200	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U 110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	130	U 130	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U 110	160	10000000	1
10132	PETN	78-11-5	1,100	U 1,100	3,200	10000000	1
10132	RDX	121-82-4	67	U 67	160	10000000	1
10132	Tetryl	479-45-8	82	U 82	160	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	54	U 54	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	54	U 54	160	10000000	1

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SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
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Project Name: SSFL Area IV Collocated Soil Sampling

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A 50-00-0	650 U	650	1,600	ug/kg	1
Perchlorate							
06557	6a Perchlorate EPA	6850 14797-73-0	2.3 U	2.3	5.4	ug/kg	1
Pesticides/PCBs							
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6	ug/kg	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6	ug/kg	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6	ug/kg	1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.8	ug/kg	1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8	ug/kg	1
10225	PCB-1232	11141-16-5	0.56 U	0.56	1.8	ug/kg	1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8	ug/kg	1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.8	ug/kg	1
10225	PCB-1254	11097-69-1	1.3 J	0.36	1.8	ug/kg	1
10225	PCB-1260	11096-82-5	0.61 J	0.36	1.8	ug/kg	1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.8	ug/kg	1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.8	ug/kg	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous							
10501	Ethanol	64-17-5	110 U	110	540	ug/kg	1
10501	Isopropanol	67-63-0	110 U	110	540	ug/kg	1
10501	Methanol	67-56-1	110 J	110	540	ug/kg	1
Terphenyls							
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.8	mg/kg	1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.8	mg/kg	1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.8	mg/kg	1
Metals							
01643	Aluminum	7429-90-5	13,600	5.42	21.6	mg/kg	1
07914	Boron	7440-42-8	4.64 J	0.959	5.39	mg/kg	1
01650	Calcium	7440-70-2	3,440	6.61	21.6	mg/kg	1
01654	Iron	7439-89-6	20,400	5.08	21.6	mg/kg	1
01656	Lithium	7439-93-2	19.3	0.24	2.2	mg/kg	1
01657	Magnesium	7439-95-4	3,910	2.74	10.8	mg/kg	1
06958	Manganese	7439-96-5	303	0.0841	0.539	mg/kg	1
10145	Phosphorus	7723-14-0	349	0.603	10.8	mg/kg	1
01662	Potassium	7440-09-7	2,660	19.4	53.9	mg/kg	1
01667	Sodium	7440-23-5	181	40.2	108	mg/kg	1
07968	Strontium	7440-24-6	18.7	0.0668	0.539	mg/kg	1
06969	Tin	7440-31-5	2.50 J	1.08	10.8	mg/kg	1
06970	Titanium	7440-32-6	1,150	0.819	2.16	mg/kg	2
10146	Zirconium	7440-67-7	1.44 J	0.905	5.39	mg/kg	1

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SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

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Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.174 J	0.0622	0.207		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.50	0.0622	0.414		2
06126	Barium	7440-39-3	119	0.112	0.414		2
06127	Beryllium	7440-41-7	0.612	0.0166	0.104		2
06128	Cadmium	7440-43-9	0.0875 J	0.0373	0.104		2
06131	Chromium	7440-47-3	21.3	0.124	0.414		2
06132	Cobalt	7440-48-4	7.07	0.0207	0.104		2
06133	Copper	7440-50-8	10.7	0.0684	0.414		2
06135	Lead	7439-92-1	6.10	0.0108	0.207		2
06138	Molybdenum	7439-98-7	0.780	0.0518	0.104		2
06139	Nickel	7440-02-0	12.8	0.104	0.414		2
06141	Selenium	7782-49-2	0.177 J	0.0414	0.414		2
06142	Silver	7440-22-4	0.0366 J	0.0124	0.104		2
06145	Thallium	7440-28-0	0.350	0.0311	0.104		2
06148	Vanadium	7440-62-2	45.3	0.0228	0.104		2
06149	Zinc	7440-66-6	89.1	0.580	3.11		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0131 J	0.0030	0.105		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5	0.86	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	3.6	0.86	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.3		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.82 J	0.22	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.53		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	391	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.70	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	

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Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	7.2	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-003-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 07:40	Laura M Krieger	0.93
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 06:04	Sara E Johnson	22.69
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:28	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:24	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 14:13	Timothy J Trees	2
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 06:02	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 08:12	Linda M Hartenstine	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 20:57	Marie D John	27.29
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:49	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 07:26	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 00:15	James H Place	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110040016A	01/05/2011 15:30	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 07:45	Lindsey K Lafferty	1

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Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
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Account # 13013

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S0345 SDG#: DE037-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	110040016A	01/05/2011 09:45	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 22:52	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 14:46	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:35	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:19	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:54	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:04	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1

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SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0345 SDG#: DE037-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 18:04	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201B	01/05/2011 18:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 07:32	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 02:19	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:15	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.9 U	6.9	8.3		0.96
06192	Benzene	71-43-2	0.10 U	0.10	4.1		0.96
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.1		0.96
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.1		0.96
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.1		0.96
06192	Bromoform	75-25-2	0.41 U	0.41	4.1		0.96
06192	Bromomethane	74-83-9	0.26 U	0.26	4.1		0.96
06192	2-Butanone	78-93-3	1.3 U	1.3	8.3		0.96
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.1		0.96
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.1		0.96
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.1		0.96
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.1		0.96
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.1		0.96
06192	Chloroethane	75-00-3	0.13 U	0.13	4.1		0.96
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.1		0.96
06192	Chloroform	67-66-3	0.12 U	0.12	4.1		0.96
06192	Chloromethane	74-87-3	0.34 U	0.34	4.1		0.96
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.1		0.96
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.1		0.96
06192	Chlorotrifluoroethene	79-38-9	0.52 U	0.52	5.2		0.96
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.72 U	0.72	4.1		0.96
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.1		0.96
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.1		0.96
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.1		0.96
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.1		0.96
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.1		0.96
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.1		0.96
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.1		0.96
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.1		0.96
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.1		0.96
06192	1,1-Dichloroethene	75-35-4	0.40 U	0.40	4.1		0.96
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.1		0.96
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.1		0.96
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.1		0.96
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.1		0.96
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.1		0.96
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.1		0.96
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.1		0.96
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.1		0.96
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.1		0.96
06192	Freon 113	76-13-1	0.11 U	0.11	4.1		0.96
06192	Freon 133a	75-88-7	0.52 U	0.52	5.2		0.96
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.1		0.96
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.3		0.96
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.1		0.96
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.1		0.96
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.1		0.96
06192	4-Methyl-2-pentanone	108-10-1	0.40 U	0.40	8.3		0.96
06192	Methylene Chloride	75-09-2	3.0 J	0.25	4.1		0.96
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.1		0.96

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.1		0.96
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.1		0.96
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.1		0.96
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.1		0.96
06192	Toluene	108-88-3	0.08 U	0.08	4.1		0.96
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.1		0.96
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.1		0.96
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.1		0.96
06192	1,1,2-Trichloroethane	79-00-5	0.28 U	0.28	4.1		0.96
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.1		0.96
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.1		0.96
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.1		0.96
06192	1,2,4-Trimethylbenzene	95-63-6	0.41 U	0.41	4.1		0.96
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.1		0.96
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.1		0.96
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.1		0.96
06192	o-Xylene	95-47-6	0.18 U	0.18	4.1		0.96
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.6 U	4.6	14		21.59
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	97.1	17.9	35.7		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	71	U 71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100		1

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Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	360		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	71	U 71	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.71	U 0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.71	U 0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U 0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U 0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U 0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4	U 6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4	U 6.4	19		1
10138	Chrysene	218-01-9	0.36	U 0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U 0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19		1
10138	Fluoranthene	206-44-0	0.71	U 0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U 0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U 0.71	1.8		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8		1
10138	Naphthalene	91-20-3	0.71 U	0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19		1
10138	Phenanthrene	85-01-8	0.71 U	0.71	1.8		1
10138	Pyrene	129-00-0	0.71 U	0.71	1.8		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1		23.06
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	80	U 80	160	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	54	U 54	160	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U 110	320	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U 110	320	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	54	U 54	160	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	54	U 54	160	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	54	U 54	160	1000000 0	1
10132	HMX	2691-41-0	130	U 130	400	1000000 0	1
10132	Nitrobenzene	98-95-3	54	U 54	160	1000000 0	1
10132	Nitroglycerin	55-63-0	1,100	U 1,100	3,200	1000000 0	1
10132	2-Nitrotoluene	88-72-2	110	U 110	160	1000000 0	1
10132	3-Nitrotoluene	99-08-1	130	U 130	160	1000000 0	1
10132	4-Nitrotoluene	99-99-0	110	U 110	160	1000000 0	1
10132	PETN	78-11-5	1,100	U 1,100	3,200	1000000 0	1
10132	RDX	121-82-4	67	U 67	160	1000000 0	1
10132	Tetryl	479-45-8	82	U 82	160	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	54	U 54	160	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	54	U 54	160	1000000 0	1

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Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A	ug/kg	ug/kg	ug/kg	ug/kg	
		50-00-0	640 U	640	1,600		1
Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8		1
10225	PCB-1232	11141-16-5	0.56 U	0.56	1.8		1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8		1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8		1
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8		1
10225	PCB-1260	11096-82-5	0.35 U	0.35	1.8		1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous							
		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	540		1
10501	Isopropanol	67-63-0	110 U	110	540		1
10501	Methanol	67-56-1	110 U	110	540		1
Terphenyls							
		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.8		1
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,100	5.34	21.2		1
07914	Boron	7440-42-8	2.87 J	0.944	5.31		1
01650	Calcium	7440-70-2	2,820	6.51	21.2		1
01654	Iron	7439-89-6	18,400	5.00	21.2		1
01656	Lithium	7439-93-2	20.9	0.23	2.1		1
01657	Magnesium	7439-95-4	3,670	2.70	10.6		1
06958	Manganese	7439-96-5	255	0.0828	0.531		1
10145	Phosphorus	7723-14-0	306	0.594	10.6		1
01662	Potassium	7440-09-7	2,360	19.1	53.1		1
01667	Sodium	7440-23-5	105 J	39.6	106		1
07968	Strontium	7440-24-6	10.9	0.0658	0.531		1
06969	Tin	7440-31-5	2.33 J	1.06	10.6		1
06970	Titanium	7440-32-6	1,050	0.807	2.12		2
10146	Zirconium	7440-67-7	0.891 U	0.891	5.31		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0994 J	0.0637	0.212		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.96	0.0637	0.424		2
06126	Barium	7440-39-3	89.2	0.115	0.424		2
06127	Beryllium	7440-41-7	0.715	0.0170	0.106		2
06128	Cadmium	7440-43-9	0.0626 J	0.0382	0.106		2
06131	Chromium	7440-47-3	18.8	0.127	0.424		2
06132	Cobalt	7440-48-4	5.88	0.0212	0.106		2
06133	Copper	7440-50-8	6.80	0.0700	0.424		2
06135	Lead	7439-92-1	5.49	0.0110	0.212		2
06138	Molybdenum	7439-98-7	0.760	0.0531	0.106		2
06139	Nickel	7440-02-0	10.5	0.106	0.424		2
06141	Selenium	7782-49-2	0.153 J	0.0424	0.424		2
06142	Silver	7440-22-4	0.0190 J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.418	0.0318	0.106		2
06148	Vanadium	7440-62-2	38.1	0.0233	0.106		2
06149	Zinc	7440-66-6	79.0	0.594	3.18		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.105		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4	0.86	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2 J	0.86	1.6		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.2		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.79 J	0.21	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.53		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	412	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.26	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	EPA 160.3 modified	%	%	%	%	%	
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-001-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 08:03	Laura M Krieger	0.96
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 06:24	Sara E Johnson	21.59
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:33	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:30	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 14:30	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 06:27	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 08:46	Linda M Hartenstine	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 21:33	Marie D John	23.06
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:48	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 08:08	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 00:24	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 08:03	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1

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Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0145 SDG#: DE037-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 23:06	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 10:17	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:39	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:22	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:22	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:22	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:06	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 18:18	Ashley M Adams	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0145 SDG#: DE037-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201B	01/05/2011 18:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 07:56	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 02:35	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:16	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	35	6.8	8.2		0.85
06192	Benzene	71-43-2	0.10 U	0.10	4.1		0.85
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.1		0.85
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.1		0.85
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.1		0.85
06192	Bromoform	75-25-2	0.41 U	0.41	4.1		0.85
06192	Bromomethane	74-83-9	0.26 U	0.26	4.1		0.85
06192	2-Butanone	78-93-3	5.6 J	1.2	8.2		0.85
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.1		0.85
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.1		0.85
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.1		0.85
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.1		0.85
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.1		0.85
06192	Chloroethane	75-00-3	0.13 U	0.13	4.1		0.85
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.1		0.85
06192	Chloroform	67-66-3	0.12 U	0.12	4.1		0.85
06192	Chloromethane	74-87-3	0.34 U	0.34	4.1		0.85
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.1		0.85
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.1		0.85
06192	Chlorotrifluoroethene	79-38-9	0.51 U	0.51	5.1		0.85
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.71 U	0.71	4.1		0.85
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	4.1		0.85
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	4.1		0.85
06192	Dibromomethane	74-95-3	0.24 U	0.24	4.1		0.85
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.1		0.85
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.1		0.85
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.1		0.85
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.1		0.85
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.1		0.85
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.1		0.85
06192	1,1-Dichloroethene	75-35-4	0.40 U	0.40	4.1		0.85
06192	cis-1,2-Dichloroethene	156-59-2	0.19 U	0.19	4.1		0.85
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.1		0.85
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	4.1		0.85
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.1		0.85
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	4.1		0.85
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.1		0.85
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.1		0.85
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	4.1		0.85
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.1		0.85
06192	Freon 113	76-13-1	0.11 U	0.11	4.1		0.85
06192	Freon 133a	75-88-7	0.51 U	0.51	5.1		0.85
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.1		0.85
06192	2-Hexanone	591-78-6	1.6 U	1.6	8.2		0.85
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.1		0.85
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.1		0.85
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	4.1		0.85
06192	4-Methyl-2-pentanone	108-10-1	0.40 U	0.40	8.2		0.85
06192	Methylene Chloride	75-09-2	1.5 J	0.24	4.1		0.85
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.1		0.85

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.1		0.85
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.1		0.85
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23 U	0.23	4.1		0.85
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	4.1		0.85
06192	Toluene	108-88-3	0.11 J	0.08	4.1		0.85
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.1		0.85
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	4.1		0.85
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	4.1		0.85
06192	1,1,2-Trichloroethane	79-00-5	0.27 U	0.27	4.1		0.85
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.1		0.85
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.1		0.85
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.1		0.85
06192	1,2,4-Trimethylbenzene	95-63-6	0.41 U	0.41	4.1		0.85
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.1		0.85
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	4.1		0.85
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	4.1		0.85
06192	o-Xylene	95-47-6	0.17 U	0.17	4.1		0.85
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.3 U	5.3	16		22.05
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	83.9	40.2	80.3		2
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	600		1
04688	Benzidine	92-87-5	1,400	U 1,400	4,000		1
04688	Benzoic acid	65-85-0	200	U 200	600		1
04688	Benzyl alcohol	100-51-6	200	U 200	600		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200		1
04688	Carbazole	86-74-8	20	U 20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40	U 40	200		1
04688	4-Chloroaniline	106-47-8	80	U 80	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200		1
04688	2-Chlorophenol	95-57-8	20	U 20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U 40	200		1
04688	Dibenzofuran	132-64-9	20	U 20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	400		1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200		1
04688	2,4-Dimethylphenol	105-67-9	40	U 40	200		1
04688	3,5-Dimethylphenol	108-68-9	40	U 40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	600		1
04688	2,4-Dinitrophenol	51-28-5	800	U 800	2,400		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	40	U 40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	20	U 20	400		1
04688	Hexachlorobenzene	118-74-1	20	U 20	200		1
04688	Hexachlorobutadiene	87-68-3	80	U 80	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	600		1
04688	Hexachloroethane	67-72-1	20	U 20	200		1
04688	Isophorone	78-59-1	20	U 20	200		1
04688	2-Methylphenol	95-48-7	40	U 40	200		1
04688	4-Methylphenol	106-44-5	40	U 40	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U 20	200		1
04688	3-Nitroaniline	99-09-2	40	U 40	200		1
04688	4-Nitroaniline	100-01-6	80	U 80	200		1
04688	Nitrobenzene	98-95-3	20	U 20	200		1
04688	2-Nitrophenol	88-75-5	20	U 20	200		1
04688	4-Nitrophenol	100-02-7	200	U 200	600		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U 200	600		1
04688	Phenol	108-95-2	20	U 20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U 20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U 40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U 40	200		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.80	U 0.80	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U 0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U 0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.80	U 0.80	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.80	U 0.80	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.80	U 0.80	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U 0.80	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U 0.80	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U 7.2	22		1
10138	Di-n-butylphthalate	84-74-2	7.2	U 7.2	22		1
10138	Chrysene	218-01-9	0.40	U 0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U 0.80	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U 7.2	22		1
10138	Dimethylphthalate	131-11-3	7.2	U 7.2	22		1
10138	Fluoranthene	206-44-0	0.80	U 0.80	2.0		1
10138	Fluorene	86-73-7	0.80	U 0.80	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U 0.80	2.0		1

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Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.80 U	0.80	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.80 U	0.80	2.0		1
10138	Naphthalene	91-20-3	0.80 U	0.80	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.80 U	0.80	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2 U	7.2	22		1
10138	Phenanthrene	85-01-8	0.80 U	0.80	2.0		1
10138	Pyrene	129-00-0	0.80 U	0.80	2.0		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.1		21.93
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	90	U 90	180	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	60	U 60	180	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U 120	360	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U 120	360	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	60	U 60	180	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	60	U 60	180	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	60	U 60	180	1000000 0	1
10132	HMX	2691-41-0	150	U 150	450	1000000 0	1
10132	Nitrobenzene	98-95-3	60	U 60	180	1000000 0	1
10132	Nitroglycerin	55-63-0	1,200	U 1,200	3,600	1000000 0	1
10132	2-Nitrotoluene	88-72-2	120	U 120	180	1000000 0	1
10132	3-Nitrotoluene	99-08-1	150	U 150	180	1000000 0	1
10132	4-Nitrotoluene	99-99-0	120	U 120	180	1000000 0	1
10132	PETN	78-11-5	1,200	U 1,200	3,600	1000000 0	1
10132	RDX	121-82-4	75	U 75	180	1000000 0	1
10132	Tetryl	479-45-8	92	U 92	180	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	60	U 60	180	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	60	U 60	180	1000000 0	1

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SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A 50-00-0	ug/kg 4,000	ug/kg 720	ug/kg 1,800	ug/kg	1
Pesticides/PCBs							
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	4.0	ug/kg	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	4.0	ug/kg	1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	4.0	ug/kg	1
10225	PCB-1016	12674-11-2	0.40 U	0.40	2.0	ug/kg	1
10225	PCB-1221	11104-28-2	0.60 U	0.60	2.0	ug/kg	1
10225	PCB-1232	11141-16-5	0.63 U	0.63	2.0	ug/kg	1
10225	PCB-1242	53469-21-9	0.60 U	0.60	2.0	ug/kg	1
10225	PCB-1248	12672-29-6	0.40 U	0.40	2.0	ug/kg	1
10225	PCB-1254	11097-69-1	0.40 U	0.40	2.0	ug/kg	1
10225	PCB-1260	11096-82-5	0.40 U	0.40	2.0	ug/kg	1
10225	PCB-1262	37324-23-5	0.40 U	0.40	2.0	ug/kg	1
10225	PCB-1268	11100-14-4	0.40 U	0.40	2.0	ug/kg	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous							
10501	Ethanol	64-17-5	120 U	120	600	ug/kg	1
10501	Isopropanol	67-63-0	120 U	120	600	ug/kg	1
10501	Methanol	67-56-1	120 U	120	600	ug/kg	1
Terphenyls							
10318	m-Terphenyl	92-06-8	1.8 U	1.8	4.2	mg/kg	1
10318	o-Terphenyl	84-15-1	1.8 U	1.8	4.2	mg/kg	1
10318	p-Terphenyl	92-94-4	1.8 U	1.8	4.2	mg/kg	1
Metals							
01643	Aluminum	7429-90-5	30,800	6.00	23.9	mg/kg	1
07914	Boron	7440-42-8	7.30	1.06	5.96	mg/kg	1
01650	Calcium	7440-70-2	19,000	7.31	23.9	mg/kg	1
01654	Iron	7439-89-6	34,500	11.2	47.7	mg/kg	2
01656	Lithium	7439-93-2	25.3	0.26	2.4	mg/kg	1
01657	Magnesium	7439-95-4	7,280	3.03	11.9	mg/kg	1
06958	Manganese	7439-96-5	398	0.0930	0.596	mg/kg	1
10145	Phosphorus	7723-14-0	413	0.668	11.9	mg/kg	1
01662	Potassium	7440-09-7	4,570	21.5	59.6	mg/kg	1
01667	Sodium	7440-23-5	254	44.5	119	mg/kg	1
07968	Strontium	7440-24-6	44.3	0.0740	0.596	mg/kg	1
06969	Tin	7440-31-5	2.80 J	1.19	11.9	mg/kg	1
06970	Titanium	7440-32-6	1,470	0.907	2.39	mg/kg	2
10146	Zirconium	7440-67-7	4.76 J	1.00	5.96	mg/kg	1
SW-846 6020							
06124	Antimony	7440-36-0	0.559	0.0723	0.241	mg/kg	2

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Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

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S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	12.2	0.0723	0.482		2
06126	Barium	7440-39-3	203	0.130	0.482		2
06127	Beryllium	7440-41-7	1.42	0.0193	0.120		2
06128	Cadmium	7440-43-9	0.212	0.0434	0.120		2
06131	Chromium	7440-47-3	55.4	0.145	0.482		2
06132	Cobalt	7440-48-4	13.7	0.0241	0.120		2
06133	Copper	7440-50-8	21.8	0.0795	0.482		2
06135	Lead	7439-92-1	13.0	0.0125	0.241		2
06138	Molybdenum	7439-98-7	1.12	0.0602	0.120		2
06139	Nickel	7440-02-0	28.4	0.120	0.482		2
06141	Selenium	7782-49-2	0.190 J	0.0482	0.482		2
06142	Silver	7440-22-4	0.0765 J	0.0145	0.120		2
06145	Thallium	7440-28-0	0.474	0.0361	0.120		2
06148	Vanadium	7440-62-2	101	0.0265	0.120		2
06149	Zinc	7440-66-6	115	0.675	3.61		2
SW-846 7471A							
00159	Mercury	7439-97-6	0.0073 J	0.0033	0.116		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.7	0.96	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.96 U	0.96	1.8		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8 U	10.8	36.1		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.37 J	0.24	1.2		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.22 U	0.22	0.61		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	433	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.46	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	17.0	0.50	0.50		1

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Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

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S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	EPA 160.3 modified	%	%	%	%	%	
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-001-SA5C-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 19:24	Laura M Krieger	0.85
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 06:43	Sara E Johnson	22.05
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:38	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:35	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/06/2011 10:00	Timothy J Trees	2
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 06:52	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 09:19	Linda M Hartenstine	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 22:09	Marie D John	21.93
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:46	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 08:51	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 00:34	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 08:22	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0191 SDG#: DE037-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 23:21	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 11:02	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/22/2010 03:42	Tara L Snyder	2
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:42	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:57	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:07	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 18:32	Ashley M Adams	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S0191 SDG#: DE037-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201B	01/05/2011 18:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 08:20	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 03:07	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:22	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3205 SDG#: DE037-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	43	J 19	190		1
04688	Aniline	62-53-3	190	U 190	570		1
04688	Anthracene	120-12-7	37	J 19	190		1
04688	Benidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	400	19	190		1
04688	Benzo(a)pyrene	50-32-8	650	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	680	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	500	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	280	19	190		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	24	J 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Chrysene	218-01-9	490	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	120	J 19	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U 760	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Fluoranthene	206-44-0	420	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	420	19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3205 SDG#: DE037-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenanthrene	85-01-8	110	J 19	190		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	Pyrene	129-00-0	540	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthylene	208-96-8	0.49	J 0.38	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21		1
10138	Diethylphthalate	84-66-2	6.9	U 6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U 6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	30	6.9	21		1
10138	Fluorene	86-73-7	2.0	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	1.9	J 0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	2.4	0.76	1.9		1
10138	Naphthalene	91-20-3	6.3	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U 0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U 6.9	21		1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.							

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U 1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U 5.0	10	1
10401	2,4-DB	94-82-6	30	U 30	30	1
10401	Dicamba	1918-00-9	0.46	U 0.46	1.4	1
10401	Dinoseb	88-85-7	0.92	U 0.92	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U 0.92	1.9	1
10401	MCPA	94-74-6	1,100	U 1,100	1,100	1
10401	MCPP (Mecoprop)	93-65-2	250	U 250	290	1
10401	2,4,5-T	93-76-5	0.094	U 0.094	0.19	1
10401	2,4,5-TP	93-72-1	0.086	U 0.086	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold

*=This limit was used in the evaluation of the final result

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Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3205 SDG#: DE037-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and 2,4-DB. Due to interfering peaks on the chromatogram, the values reported for MCPP represent the lowest reporting limits attainable.							
Perchlorate							
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007 14797-73-0	ug/kg 2.4 U	ug/kg 2.4	ug/kg 5.7	ug/kg	1
Pesticides/PCBs							
01363	Aldrin	SW-846 8081A 309-00-2	ug/kg 0.079 U	ug/kg 0.079	ug/kg 0.19	ug/kg	1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.35	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	5.0 U	5.0	5.0		1
01363	p,p-DDD	72-54-8	2.4 U	2.4	2.4		1
01363	p,p-DDE	72-55-9	1.3 U	1.3	1.3		1
01363	p,p-DDT	50-29-3	2.4 U	2.4	2.4		1
01363	Delta BHC	319-86-8	0.19	0.041	0.19		1
01363	Dieldrin	60-57-1	0.47 U	0.47	0.47		1
01363	Endosulfan I	959-98-8	0.11 U	0.11	0.19		1
01363	Endosulfan II	33213-65-9	0.32 U	0.32	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.76 U	0.76	0.76		1
01363	Endrin	72-20-8	0.076 U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.62 U	0.62	0.62		1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.084 U	0.084	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.33 U	0.33	0.33		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.076 U	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1
The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs							
10225	Aroclor 5432	SW-846 8082 63496-31-1	ug/kg 2.3 U	ug/kg 2.3	ug/kg 7.6	ug/kg	2
10225	Aroclor 5442	12642-23-8	2.3 U	2.3	7.6		2
10225	Aroclor 5460	11126-42-4	8.5	2.3	7.6		2

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Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3205 SDG#: DE037-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs							
	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1016	12674-11-2	0.76 U	0.76	3.9		2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.9		2
10225	PCB-1232	11141-16-5	1.2 U	1.2	3.9		2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.9		2
10225	PCB-1248	12672-29-6	0.76 U	0.76	3.9		2
10225	PCB-1254	11097-69-1	18	0.76	3.9		2
10225	PCB-1260	11096-82-5	9.5	0.76	3.9		2
10225	PCB-1262	37324-23-5	0.76 U	0.76	3.9		2
10225	PCB-1268	11100-14-4	0.76 U	0.76	3.9		2
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,300	5.64	22.4		1
07914	Boron	7440-42-8	4.97 J	0.998	5.61		1
01650	Calcium	7440-70-2	3,360	6.88	22.4		1
01654	Iron	7439-89-6	17,800	5.28	22.4		1
01656	Lithium	7439-93-2	19.4	0.25	2.2		1
01657	Magnesium	7439-95-4	4,130	2.85	11.2		1
06958	Manganese	7439-96-5	254	0.0875	0.561		1
10145	Phosphorus	7723-14-0	386	0.628	11.2		1
01662	Potassium	7440-09-7	2,790	20.2	56.1		1
01667	Sodium	7440-23-5	78.8 J	41.8	112		1
07968	Strontium	7440-24-6	18.3	0.0695	0.561		1
06969	Tin	7440-31-5	2.66 J	1.12	11.2		1
06970	Titanium	7440-32-6	1,030	0.853	2.24		2
10146	Zirconium	7440-67-7	1.22 J	0.942	5.61		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.192 J	0.0673	0.224		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.28	0.0673	0.449		2
06126	Barium	7440-39-3	112	0.121	0.449		2
06127	Beryllium	7440-41-7	0.616	0.0179	0.112		2
06128	Cadmium	7440-43-9	0.249	0.0404	0.112		2
06131	Chromium	7440-47-3	25.4	0.135	0.449		2
06132	Cobalt	7440-48-4	6.30	0.0224	0.112		2
06133	Copper	7440-50-8	13.1	0.0740	0.449		2
06135	Lead	7439-92-1	25.0	0.0292	0.561		5
06138	Molybdenum	7439-98-7	0.707	0.0561	0.112		2
06139	Nickel	7440-02-0	17.6	0.112	0.449		2
06141	Selenium	7782-49-2	0.168 J	0.0449	0.449		2
06142	Silver	7440-22-4	1.39	0.0135	0.112		2
06145	Thallium	7440-28-0	0.298	0.0337	0.112		2
06148	Vanadium	7440-62-2	42.8	0.0247	0.112		2
06149	Zinc	7440-66-6	109	0.628	3.37		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3205 SDG#: DE037-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
00159	Mercury	SW-846 7471A 7439-97-6	mg/kg 0.0148 J	mg/kg 0.0032	mg/kg 0.111	mg/kg	1
Wet Chemistry							
07332	11a Anions by 300.0 - Fluoride	EPA 300.0 16984-48-8	mg/kg 1.7	mg/kg 0.92	mg/kg 1.1	mg/kg	1
10147	7a Perchlorate EPA 314.0	EPA 314.0 14797-73-0	ug/kg 10.3 U	ug/kg 10.3	ug/kg 34.3	ug/kg	1
05892	3a Cr VI by EPA 7199	SW-846 7199 18540-29-9	mg/kg 0.23 U	mg/kg 0.23	mg/kg 1.1	mg/kg	1
01821	Oxidation Reduction Potential	ASTM D1498 n.a.	mV 435	mV 10.0	mV 10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
00394	22a pH by 9045C	SW-846 9045C modified n.a.	Std. Units 8.48	Std. Units 0.0100	Std. Units 0.0100	Std. Units	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified n.a.	% 12.6	% 0.50	% 0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 07:17	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 09:52	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 05:24	John W Perkins	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3205 SDG#: DE037-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103490017A	12/20/2010 18:21	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 03:15	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 08:41	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103490017A	12/16/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:46	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:34	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:59	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/26/2010 07:22	Choon Y Tian	5
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:34	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:34	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:08	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3205 SDG#: DE037-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 19:15	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 09:08	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 03:23	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3305 SDG#: DE037-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U 180	530		1
04688	Benzyl alcohol	100-51-6	180	U 180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180		1
04688	4-Chloroaniline	106-47-8	71	U 71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530		1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	35	U 35	180		1
04688	4-Methylphenol	106-44-5	35	U 35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	35	U 35	180		1
04688	4-Nitroaniline	100-01-6	71	U 71	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	530		1
04688	Phenol	108-95-2	18	U 18	180		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3305 SDG#: DE037-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.8		1
10138	Anthracene	120-12-7	0.99	J 0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	15	0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	25	0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	39	0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	11	0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	14	0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4	U 6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4	U 6.4	19		1
10138	Chrysene	218-01-9	20	0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	3.2	0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	17	J 6.4	19		1
10138	Fluoranthene	206-44-0	14	0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U 0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	10	0.71	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.94	J 0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.96	J 0.71	1.8		1
10138	Naphthalene	91-20-3	1.1	J 0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U 0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U 6.4	19		1
10138	Phenanthrene	85-01-8	6.2	0.71	1.8		1
10138	Pyrene	129-00-0	15	0.71	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	3.8
10401	Dalapon	75-99-0	4.7	U 4.7	9.6
10401	2,4-DB	94-82-6	5.1	0.66	1.8
10401	Dicamba	1918-00-9	0.42	U 0.42	1.3
10401	Dinoseb	88-85-7	0.85	U 0.85	2.5
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U 0.85	1.8
10401	MCPA	94-74-6	270	U 270	270
10401	MCPP (Mecoprop)	93-65-2	410	U 410	410
10401	2,4,5-T	93-76-5	0.087	U 0.087	0.18
10401	2,4,5-TP	93-72-1	0.080	U 0.080	0.18

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

2,4-DB is detected in the method blank at a concentration of 1.2 ug/l. The sample was reextracted outside the sample hold time. The method blank in the

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Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3305 SDG#: DE037-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPP and MCPA represent the lowest reporting limits attainable.							
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg ug/kg							
01363	Aldrin	309-00-2	0.070 U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.16 J	0.036	0.18		1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18		1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6		1
01363	p,p-DDD	72-54-8	0.29 U	0.29	0.36		1
01363	p,p-DDE	72-55-9	0.11 U	0.11	0.36		1
01363	p,p-DDT	50-29-3	0.37 U	0.37	0.37		1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18		1
01363	Dieldrin	60-57-1	0.15 U	0.15	0.36		1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36		1
01363	Endrin	72-20-8	0.070 U	0.070	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36		1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36		1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.047 U	0.047	0.18		1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8		1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36		1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0		1
The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg ug/kg							
10225	Aroclor 5432	63496-31-1	2.1 U	2.1	7.0		2
10225	Aroclor 5442	12642-23-8	2.1 U	2.1	7.0		2
10225	Aroclor 5460	11126-42-4	2.1 U	2.1	7.0		2
10225	PCB-1016	12674-11-2	0.70 U	0.70	3.6		2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.6		2
10225	PCB-1232	11141-16-5	1.1 U	1.1	3.6		2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.6		2
10225	PCB-1248	12672-29-6	0.70 U	0.70	3.6		2
10225	PCB-1254	11097-69-1	1.7 J	0.70	3.6		2
10225	PCB-1260	11096-82-5	2.1 J	0.70	3.6		2
10225	PCB-1262	37324-23-5	0.70 U	0.70	3.6		2
10225	PCB-1268	11100-14-4	0.70 U	0.70	3.6		2
The stated QC limits are advisory only until sufficient data points							

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3305 SDG#: DE037-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
can be obtained to calculate statistical limits.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	7,300	5.13	20.4		1
07914	Boron	7440-42-8	3.23 J	0.908	5.10		1
01650	Calcium	7440-70-2	1,710	6.26	20.4		1
01654	Iron	7439-89-6	13,900	4.81	20.4		1
01656	Lithium	7439-93-2	14.9	0.22	2.0		1
01657	Magnesium	7439-95-4	3,090	2.59	10.2		1
06958	Manganese	7439-96-5	247	0.0796	0.510		1
10145	Phosphorus	7723-14-0	267	0.572	10.2		1
01662	Potassium	7440-09-7	1,810	18.4	51.0		1
01667	Sodium	7440-23-5	64.8 J	38.1	102		1
07968	Strontium	7440-24-6	9.87	0.0633	0.510		1
06969	Tin	7440-31-5	1.86 J	1.02	10.2		1
06970	Titanium	7440-32-6	759	0.388	1.02		1
10146	Zirconium	7440-67-7	0.857 U	0.857	5.10		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.286	0.0624	0.208		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.50	0.0624	0.416		2
06126	Barium	7440-39-3	133	0.112	0.416		2
06127	Beryllium	7440-41-7	0.782	0.0167	0.104		2
06128	Cadmium	7440-43-9	0.150	0.0375	0.104		2
06131	Chromium	7440-47-3	36.8	0.125	0.416		2
06132	Cobalt	7440-48-4	7.49	0.0208	0.104		2
06133	Copper	7440-50-8	15.8	0.0687	0.416		2
06135	Lead	7439-92-1	15.0	0.0108	0.208		2
06138	Molybdenum	7439-98-7	0.691	0.0520	0.104		2
06139	Nickel	7440-02-0	21.6	0.104	0.416		2
06141	Selenium	7782-49-2	0.209 J	0.0416	0.416		2
06142	Silver	7440-22-4	0.329	0.0125	0.104		2
06145	Thallium	7440-28-0	0.435	0.0312	0.104		2
06148	Vanadium	7440-62-2	58.0	0.0229	0.104		2
06149	Zinc	7440-66-6	118	0.583	3.12		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0029 U	0.0029	0.0998		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.90 J	0.85	1.1		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	31.8		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3305 SDG#: DE037-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	433	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.00	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 07:42	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 10:26	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 06:47	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 03:28	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 08:59	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 01/25/2011 16:47

S3305 SDG#: DE037-17*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 11:01	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:37	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:09	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 19:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 09:32	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 03:39	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B103482AA	Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163885								
Acetone	6.7 U	6.7	8.0	ug/kg	183		32-209		
Benzene	0.10 U	0.10	4.0	ug/kg	100		80-120		
Bromobenzene	0.13 U	0.13	4.0	ug/kg	91		79-120		
Bromochloromethane	0.33 U	0.33	4.0	ug/kg	97		79-124		
Bromodichloromethane	0.08 U	0.08	4.0	ug/kg	97		78-120		
Bromoform	0.40 U	0.40	4.0	ug/kg	95		70-120		
Bromomethane	0.25 U	0.25	4.0	ug/kg	72		32-162		
2-Butanone	1.2 U	1.2	8.0	ug/kg	133		46-153		
n-Butylbenzene	0.12 U	0.12	4.0	ug/kg	98		72-120		
sec-Butylbenzene	0.06 U	0.06	4.0	ug/kg	97		75-120		
tert-Butylbenzene	0.16 U	0.16	4.0	ug/kg	92		75-120		
Carbon Tetrachloride	0.14 U	0.14	4.0	ug/kg	101		69-122		
Chlorobenzene	0.11 U	0.11	4.0	ug/kg	97		80-120		
Chloroethane	0.13 U	0.13	4.0	ug/kg	77		37-154		
2-Chloroethyl Vinyl Ether	0.30 U	0.30	4.0	ug/kg	94		43-146		
Chloroform	0.22 J	0.12	4.0	ug/kg	102		80-120		
Chloromethane	0.33 U	0.33	4.0	ug/kg	72		54-132		
2-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	94		78-120		
4-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	96		79-120		
Chlorotrifluoroethene	0.50 U	0.50	5.0	ug/kg	101		22-131		
1,2-Dibromo-3-chloropropane	0.70 U	0.70	4.0	ug/kg	90		58-120		
Dibromochloromethane	0.20 U	0.20	4.0	ug/kg	97		77-120		
1,2-Dibromoethane	0.17 U	0.17	4.0	ug/kg	95		80-120		
Dibromomethane	0.24 U	0.24	4.0	ug/kg	99		80-120		
1,2-Dichlorobenzene	0.09 U	0.09	4.0	ug/kg	95		79-120		
1,3-Dichlorobenzene	0.12 U	0.12	4.0	ug/kg	92		78-120		
1,4-Dichlorobenzene	0.16 U	0.16	4.0	ug/kg	94		79-120		
Dichlorodifluoromethane	0.12 U	0.12	4.0	ug/kg	54		20-120		
1,1-Dichloroethane	0.10 U	0.10	4.0	ug/kg	99		80-120		
1,2-Dichloroethane	0.15 U	0.15	4.0	ug/kg	100		71-129		
1,1-Dichloroethene	0.39 U	0.39	4.0	ug/kg	99		73-123		
cis-1,2-Dichloroethene	0.19 U	0.19	4.0	ug/kg	99		80-120		
trans-1,2-Dichloroethene	0.12 U	0.12	4.0	ug/kg	98		79-120		
1,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	99		80-120		
1,3-Dichloropropane	0.08 U	0.08	4.0	ug/kg	96		80-120		
2,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	98		72-123		
1,1-Dichloropropene	0.13 U	0.13	4.0	ug/kg	98		77-120		
cis-1,3-Dichloropropene	0.16 U	0.16	4.0	ug/kg	91		80-120		
trans-1,3-Dichloropropene	0.17 U	0.17	4.0	ug/kg	90		77-120		
Ethylbenzene	0.06 U	0.06	4.0	ug/kg	98		80-120		
Freon 113	0.11 U	0.11	4.0	ug/kg	100		61-126		
Freon 133a	0.50 U	0.50	5.0	ug/kg	92		78-120		
Hexachlorobutadiene	0.14 U	0.14	4.0	ug/kg	92		57-120		
2-Hexanone	1.6 U	1.6	8.0	ug/kg	87		45-155		
Isopropylbenzene	0.06 U	0.06	4.0	ug/kg	99		76-120		
p-Isopropyltoluene	0.11 U	0.11	4.0	ug/kg	98		75-120		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21 U	0.21	4.0	ug/kg	94		74-121		
4-Methyl-2-pentanone	0.39 U	0.39	8.0	ug/kg	78		61-134		
Methylene Chloride	1.3 J	0.24	4.0	ug/kg	99		76-124		
n-Propylbenzene	0.07 U	0.07	4.0	ug/kg	100		77-120		
Styrene	0.10 U	0.10	4.0	ug/kg	97		76-120		
1,1,1,2-Tetrachloroethane	0.11 U	0.11	4.0	ug/kg	99		80-120		
1,1,2,2-Tetrachloroethane	0.23 U	0.23	4.0	ug/kg	95		71-123		
Tetrachloroethene	0.20 U	0.20	4.0	ug/kg	99		77-120		
Toluene	0.09 J	0.08	4.0	ug/kg	98		80-120		
1,2,3-Trichlorobenzene	0.14 U	0.14	4.0	ug/kg	92		64-120		
1,2,4-Trichlorobenzene	0.18 U	0.18	4.0	ug/kg	89		68-120		
1,1,1-Trichloroethane	0.20 U	0.20	4.0	ug/kg	100		71-125		
1,1,2-Trichloroethane	0.27 U	0.27	4.0	ug/kg	96		80-120		
Trichloroethene	0.15 U	0.15	4.0	ug/kg	97		80-120		
Trichlorofluoromethane	0.29 U	0.29	4.0	ug/kg	85		58-133		
1,2,3-Trichloropropane	0.33 U	0.33	4.0	ug/kg	93		71-123		
1,2,4-Trimethylbenzene	0.40 U	0.40	4.0	ug/kg	97		79-120		
1,3,5-Trimethylbenzene	0.10 U	0.10	4.0	ug/kg	96		78-120		
Vinyl Chloride	0.20 U	0.20	4.0	ug/kg	76		53-120		
m+p-Xylene	0.17 U	0.17	4.0	ug/kg	99		80-120		
o-Xylene	0.17 U	0.17	4.0	ug/kg	95		80-120		
Batch number: B103501AA Sample number(s): 6163886									
Acetone	6.7 U	6.7	8.0	ug/kg	189	181	32-209	5	30
Benzene	0.10 U	0.10	4.0	ug/kg	105	105	80-120	0	30
Bromobenzene	0.13 U	0.13	4.0	ug/kg	93	92	79-120	1	30
Bromochloromethane	0.33 U	0.33	4.0	ug/kg	101	101	79-124	0	30
Bromodichloromethane	0.08 U	0.08	4.0	ug/kg	98	97	78-120	0	30
Bromoform	0.40 U	0.40	4.0	ug/kg	95	94	70-120	1	30
Bromomethane	0.25 U	0.25	4.0	ug/kg	76	77	32-162	2	30
2-Butanone	1.2 U	1.2	8.0	ug/kg	144	139	46-153	3	30
n-Butylbenzene	0.12 U	0.12	4.0	ug/kg	100	99	72-120	1	30
sec-Butylbenzene	0.06 U	0.06	4.0	ug/kg	99	99	75-120	0	30
tert-Butylbenzene	0.16 U	0.16	4.0	ug/kg	94	95	75-120	1	30
Carbon Tetrachloride	0.14 U	0.14	4.0	ug/kg	103	102	69-122	1	30
Chlorobenzene	0.11 U	0.11	4.0	ug/kg	98	98	80-120	0	30
Chloroethane	0.13 U	0.13	4.0	ug/kg	80	82	37-154	2	30
2-Chloroethyl Vinyl Ether	0.30 U	0.30	4.0	ug/kg	106	103	43-146	3	30
Chloroform	0.37 J	0.12	4.0	ug/kg	104	103	80-120	0	30
Chloromethane	0.33 U	0.33	4.0	ug/kg	89	90	54-132	0	30
2-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	96	96	78-120	1	30
4-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	96	95	79-120	0	30
Chlorotrifluoroethene	0.50 U	0.50	5.0	ug/kg	84	85	22-131	2	30
1,2-Dibromo-3-chloropropane	0.70 U	0.70	4.0	ug/kg	97	94	58-120	4	30
Dibromochloromethane	0.20 U	0.20	4.0	ug/kg	97	95	77-120	2	30
1,2-Dibromoethane	0.17 U	0.17	4.0	ug/kg	99	97	80-120	2	30
Dibromomethane	0.24 U	0.24	4.0	ug/kg	102	100	80-120	2	30
1,2-Dichlorobenzene	0.09 U	0.09	4.0	ug/kg	95	95	79-120	0	30
1,3-Dichlorobenzene	0.12 U	0.12	4.0	ug/kg	93	93	78-120	0	30
1,4-Dichlorobenzene	0.16 U	0.16	4.0	ug/kg	95	93	79-120	1	30
Dichlorodifluoromethane	0.12 U	0.12	4.0	ug/kg	76	75	20-120	1	30
1,1-Dichloroethane	0.10 U	0.10	4.0	ug/kg	104	104	80-120	1	30
1,2-Dichloroethane	0.15 U	0.15	4.0	ug/kg	103	102	71-129	1	30
1,1-Dichloroethene	0.39 U	0.39	4.0	ug/kg	101	100	73-123	1	30
cis-1,2-Dichloroethene	0.19 U	0.19	4.0	ug/kg	103	102	80-120	2	30
trans-1,2-Dichloroethene	0.12 U	0.12	4.0	ug/kg	102	101	79-120	0	30
1,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	104	103	80-120	1	30
1,3-Dichloropropane	0.08 U	0.08	4.0	ug/kg	100	99	80-120	1	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
2,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	102	101	72-123	1	30
1,1-Dichloropropane	0.13 U	0.13	4.0	ug/kg	104	104	77-120	1	30
cis-1,3-Dichloropropane	0.16 U	0.16	4.0	ug/kg	94	96	80-120	2	30
trans-1,3-Dichloropropane	0.17 U	0.17	4.0	ug/kg	95	94	77-120	1	30
Ethylbenzene	0.06 U	0.06	4.0	ug/kg	100	100	80-120	0	30
Freon 113	0.11 U	0.11	4.0	ug/kg	101	100	61-126	1	30
Freon 133a	0.50 U	0.50	5.0	ug/kg	85	85	78-120	1	30
Hexachlorobutadiene	0.14 U	0.14	4.0	ug/kg	90	91	57-120	1	30
2-Hexanone	1.6 U	1.6	8.0	ug/kg	95	93	45-155	3	30
Isopropylbenzene	0.06 U	0.06	4.0	ug/kg	101	100	76-120	1	30
p-Isopropyltoluene	0.11 U	0.11	4.0	ug/kg	99	100	75-120	1	30
Methyl Tertiary Butyl Ether	0.21 U	0.21	4.0	ug/kg	101	100	74-121	1	30
4-Methyl-2-pentanone	0.39 U	0.39	8.0	ug/kg	84	82	61-134	3	30
Methylene Chloride	1.0 J	0.24	4.0	ug/kg	99	100	76-124	1	30
n-Propylbenzene	0.07 U	0.07	4.0	ug/kg	101	101	77-120	0	30
Styrene	0.10 U	0.10	4.0	ug/kg	97	97	76-120	0	30
1,1,1,2-Tetrachloroethane	0.11 U	0.11	4.0	ug/kg	98	97	80-120	1	30
1,1,2,2-Tetrachloroethane	0.23 U	0.23	4.0	ug/kg	97	95	71-123	2	30
Tetrachloroethene	0.20 U	0.20	4.0	ug/kg	100	98	77-120	2	30
Toluene	0.08 U	0.08	4.0	ug/kg	101	100	80-120	0	30
1,2,3-Trichlorobenzene	0.14 U	0.14	4.0	ug/kg	92	92	64-120	0	30
1,2,4-Trichlorobenzene	0.18 U	0.18	4.0	ug/kg	90	91	68-120	0	30
1,1,1-Trichloroethane	0.20 U	0.20	4.0	ug/kg	103	101	71-125	2	30
1,1,2-Trichloroethane	0.27 U	0.27	4.0	ug/kg	99	96	80-120	2	30
Trichloroethene	0.15 U	0.15	4.0	ug/kg	101	100	80-120	0	30
Trichlorofluoromethane	0.29 U	0.29	4.0	ug/kg	86	85	58-133	1	30
1,2,3-Trichloropropane	0.33 U	0.33	4.0	ug/kg	99	95	71-123	4	30
1,2,4-Trimethylbenzene	0.40 U	0.40	4.0	ug/kg	98	99	79-120	1	30
1,3,5-Trimethylbenzene	0.10 U	0.10	4.0	ug/kg	98	98	78-120	0	30
Vinyl Chloride	0.20 U	0.20	4.0	ug/kg	88	88	53-120	0	30
m+p-Xylene	0.17 U	0.17	4.0	ug/kg	101	100	80-120	1	30
o-Xylene	0.17 U	0.17	4.0	ug/kg	98	96	80-120	2	30

Batch number: E103491AA
1,4-Dioxane

Sample number(s): 6163875
0.5 U 0.5 2.0 ug/l 100 107 60-132 6 30

Batch number: E103493AA
1,4-Dioxane

Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886
5.0 U 5.0 15 ug/kg 108 112 70-130 4 30

Batch number: Y103512AA

Sample number(s): 6163875

Acetone	6 U	6.	20	ug/l	186	190	49-234	2	30
Benzene	0.5 U	0.5	5	ug/l	96	95	79-120	1	30
Bromobenzene	1 U	1.	5	ug/l	103	103	80-120	0	30
Bromochloromethane	1 U	1.	5	ug/l	94	92	80-120	2	30
Bromodichloromethane	1 U	1.	5	ug/l	91	91	80-120	0	30
Bromoform	1 U	1.	5	ug/l	93	92	61-120	2	30
Bromomethane	1 U	1.	5	ug/l	87	79	44-120	10	30
2-Butanone	3 U	3.	10	ug/l	125	130	66-151	4	30
n-Butylbenzene	1 U	1.	5	ug/l	100	100	74-120	1	30
sec-Butylbenzene	1 U	1.	5	ug/l	107	106	78-120	1	30
tert-Butylbenzene	1 U	1.	5	ug/l	97	97	80-120	0	30
Carbon Tetrachloride	1 U	1.	5	ug/l	99	96	75-123	3	30
Chlorobenzene	0.8 U	0.8	5	ug/l	94	95	80-120	0	30
Chloroethane	1 U	1.	5	ug/l	82	75	49-129	9	30
2-Chloroethyl Vinyl Ether	2 U	2.	10	ug/l	101	102	56-129	1	30
Chloroform	0.8 U	0.8	5	ug/l	98	96	77-122	2	30
Chloromethane	1 U	1.	5	ug/l	83	81	60-129	2	30
2-Chlorotoluene	1 U	1.	5	ug/l	104	103	80-120	1	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
4-Chlorotoluene	1 U	1.	5	ug/l	99	99	80-120	0	30
Chlorotrifluoroethene	2 U	2.	5	ug/l	73	76	38-136	4	30
1,2-Dibromo-3-chloropropane	2 U	2.	5	ug/l	105	108	66-120	3	30
Dibromochloromethane	1 U	1.	5	ug/l	94	94	80-120	1	30
1,2-Dibromoethane	1 U	1.	5	ug/l	97	99	80-120	2	30
Dibromomethane	1 U	1.	5	ug/l	94	93	80-120	1	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	96	95	80-120	1	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	102	100	80-120	2	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	99	98	80-120	1	30
Dichlorodifluoromethane	2 U	2.	5	ug/l	77	72	47-120	6	30
1,1-Dichloroethane	1 U	1.	5	ug/l	98	97	79-120	1	30
1,2-Dichloroethane	1 U	1.	5	ug/l	96	95	70-130	1	30
1,1-Dichloroethene	0.8 U	0.8	5	ug/l	100	103	74-123	4	30
cis-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	97	96	80-120	1	30
trans-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	95	95	80-120	0	30
1,2-Dichloropropane	1 U	1.	5	ug/l	93	93	78-120	0	30
1,3-Dichloropropane	1 U	1.	5	ug/l	98	99	80-120	1	30
2,2-Dichloropropane	1 U	1.	5	ug/l	91	90	77-124	2	30
1,1-Dichloropropene	1 U	1.	5	ug/l	98	95	80-120	2	30
cis-1,3-Dichloropropene	1 U	1.	5	ug/l	87	87	80-120	0	30
trans-1,3-Dichloropropene	1 U	1.	5	ug/l	93	92	79-120	0	30
Ethylbenzene	0.8 U	0.8	5	ug/l	98	97	79-120	2	30
Freon 113	2 U	2.	10	ug/l	112	115	69-128	3	30
Freon 133a	2 U	2.	5	ug/l	98	99	77-120	2	30
Hexachlorobutadiene	2 U	2.	5	ug/l	93	96	58-120	3	30
2-Hexanone	3 U	3.	10	ug/l	116	120	65-136	3	30
Isopropylbenzene	1 U	1.	5	ug/l	96	96	77-120	1	30
p-Isopropyltoluene	1 U	1.	5	ug/l	103	102	80-120	1	30
Methyl Tertiary Butyl Ether	0.5 U	0.5	5	ug/l	94	95	76-120	1	30
4-Methyl-2-pentanone	3 U	3.	10	ug/l	97	97	70-121	0	30
Methylene Chloride	2 U	2.	5	ug/l	98	100	80-120	3	30
n-Propylbenzene	1 U	1.	5	ug/l	110	108	80-120	1	30
Styrene	1 U	1.	5	ug/l	97	95	80-120	1	30
1,1,1,2-Tetrachloroethane	1 U	1.	5	ug/l	97	97	80-120	0	30
1,1,2,2-Tetrachloroethane	1 U	1.	5	ug/l	106	107	71-120	1	30
Tetrachloroethene	0.8 U	0.8	5	ug/l	98	97	80-121	1	30
Toluene	0.7 U	0.7	5	ug/l	98	98	79-120	0	30
1,2,3-Trichlorobenzene	1 U	1.	5	ug/l	95	97	65-120	2	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	95	97	67-120	2	30
1,1,1-Trichloroethane	0.8 U	0.8	5	ug/l	98	97	75-127	1	30
1,1,2-Trichloroethane	0.8 U	0.8	5	ug/l	100	100	80-120	0	30
Trichloroethene	1 U	1.	5	ug/l	94	92	80-120	2	30
Trichlorofluoromethane	2 U	2.	5	ug/l	89	89	64-129	0	30
1,2,3-Trichloropropane	1 U	1.	5	ug/l	109	109	80-120	0	30
1,2,4-Trimethylbenzene	1 U	1.	5	ug/l	105	104	74-120	1	30
1,3,5-Trimethylbenzene	1 U	1.	5	ug/l	103	102	75-120	1	30
Vinyl Chloride	1 U	1.	5	ug/l	79	78	65-125	1	30
m+p-Xylene	0.8 U	0.8	5	ug/l	93	93	80-120	1	30
o-Xylene	0.8 U	0.8	5	ug/l	94	94	80-120	0	30

Batch number: 10349WAI026

Sample number(s): 6163875

Acenaphthene	0.010 U	0.010	0.050	ug/l	99	103	74-109	4	30
Acenaphthylene	0.010 U	0.010	0.050	ug/l	106	109	70-110	3	30
Anthracene	0.010 U	0.010	0.050	ug/l	106	109	66-111	2	30
Benzo(a)anthracene	0.010 U	0.010	0.050	ug/l	102	107	72-114	5	30
Benzo(a)pyrene	0.010 U	0.010	0.050	ug/l	101	104	64-115	3	30
Benzo(b)fluoranthene	0.010 U	0.010	0.050	ug/l	108	108	69-123	1	30
Benzo(g,h,i)perylene	0.010 U	0.010	0.050	ug/l	94	96	68-125	2	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(k)fluoranthene	0.010 U	0.010	0.050	ug/l	102	106	72-122	4	30
Butylbenzylphthalate	0.076 J	0.050	1.0	ug/l	100	102	70-130	1	30
Di-n-butylphthalate	0.13 J	0.050	1.0	ug/l	107	113	70-130	5	30
Chrysene	0.010 U	0.010	0.050	ug/l	103	104	76-116	0	30
Dibenz(a,h)anthracene	0.010 U	0.010	0.050	ug/l	93	96	71-125	3	30
Diethylphthalate	0.063 J	0.050	1.0	ug/l	113	115	70-130	2	30
Dimethylphthalate	0.050 U	0.050	1.0	ug/l	96	91	70-130	5	30
Bis(2-Ethylhexyl)phthalate	0.11 J	0.050	1.0	ug/l	114	123	70-130	8	30
Fluoranthene	0.010 U	0.010	0.050	ug/l	108	110	75-116	2	30
Fluorene	0.010 U	0.010	0.050	ug/l	106	108	75-114	2	30
Indeno(1,2,3-cd)pyrene	0.010 U	0.010	0.050	ug/l	94	96	69-124	2	30
1-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	105	107	71-117	1	30
2-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	95	97	75-115	2	30
Naphthalene	0.010 U	0.010	0.050	ug/l	100	102	72-109	2	30
N-Nitrosodimethylamine	0.010 U	0.010	0.050	ug/l	84	87	70-130	3	30
Di-n-octylphthalate	0.084 J	0.050	1.0	ug/l	102	112	70-130	9	30
Phenanthrene	0.010 U	0.010	0.050	ug/l	99	103	76-111	4	30
Pyrene	0.010 U	0.010	0.050	ug/l	102	106	69-118	3	30

Batch number: 10350WAB026

Sample number(s): 6163875

Aniline	1	U	1.	5	ug/l	67	66	49-101	1	30
Benzidine	20	U	20.	60	ug/l	64	62	20-109	3	30
Benzoic acid	6	U	6.	15	ug/l	30	48	10-69	44*	30
Benzyl alcohol	5	U	5.	15	ug/l	79	91	66-97	14	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	86	107	82-117	22	30
Carbazole	1	U	1.	5	ug/l	92	110	81-114	18	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	89	112	70-123	22	30
4-Chloroaniline	1	U	1.	5	ug/l	51	58	42-124	14	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	89	109	74-124	20	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	90	105	77-108	16	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	92	105	62-127	13	30
2-Chloronaphthalene	2	U	2.	5	ug/l	77	81	54-132	5	30
2-Chlorophenol	1	U	1.	5	ug/l	91	109*	77-108	18	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	90	111	82-111	21	30
Dibenzofuran	1	U	1.	5	ug/l	91	111*	83-108	20	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	84	94	67-108	12	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	83	93	63-110	12	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	82	93	65-113	12	30
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	53	57	49-111	9	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	96	117*	80-109	20	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	96	117*	72-110	20	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	93	117	70-130	23	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	86	102	78-119	17	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	77	91	64-120	16	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	93	110	81-115	17	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	90	110	85-115	20	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	96	118*	78-116	21	30
Hexachlorobenzene	1	U	1.	5	ug/l	88	108	81-118	20	30
Hexachlorobutadiene	1	U	1.	5	ug/l	81	92	57-124	13	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	71	77	10-118	8	30
Hexachloroethane	1	U	1.	5	ug/l	80	91	52-113	13	30
Isophorone	1	U	1.	5	ug/l	91	114	74-117	22	30
2-Methylphenol	1	U	1.	5	ug/l	85	102*	64-101	18	30
4-Methylphenol	2	U	2.	5	ug/l	76	93	61-103	21	30
2-Nitroaniline	1	U	1.	5	ug/l	91	111	83-116	20	30
3-Nitroaniline	1	U	1.	5	ug/l	88	101	74-113	14	30
4-Nitroaniline	1	U	1.	5	ug/l	74	82	59-100	11	30
Nitrobenzene	1	U	1.	5	ug/l	90	104	75-109	14	30

*- Outside of specification

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- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2-Nitrophenol	1 U	1.	5	ug/l	91	108	86-120	18	30
4-Nitrophenol	10 U	10.	30	ug/l	44	53	16-78	19	30
N-Nitroso-di-n-propylamine	1 U	1.	5	ug/l	89	108	69-110	19	30
N-Nitrosodiphenylamine	2 U	2.	5	ug/l	91	111	67-136	20	30
Pentachlorophenol	3 U	3.	15	ug/l	75	84	53-110	12	30
Phenol	1 U	1.	5	ug/l	40	47	29-67	17	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	85	100	71-112	16	30
2,4,5-Trichlorophenol	1 U	1.	5	ug/l	90	108*	79-107	19	30
2,4,6-Trichlorophenol	1 U	1.	5	ug/l	93	110	81-113	17	30

Batch number: 10351SLB026

Sample number(s): 6163869-6163873, 6163876-6163888

Acenaphthene	17 U	17.	170	ug/kg	92		76-111
Acenaphthylene	17 U	17.	170	ug/kg	95		75-122
Aniline	170 U	170.	500	ug/kg	60		10-107
Anthracene	17 U	17.	170	ug/kg	94		76-112
Benzidine	1,200 U	1,200.	3,300	ug/kg	45		15-121
Benzo(a)anthracene	17 U	17.	170	ug/kg	96		73-112
Benzo(a)pyrene	17 U	17.	170	ug/kg	85		69-122
Benzo(b)fluoranthene	17 U	17.	170	ug/kg	86		61-127
Benzo(g,h,i)perylene	17 U	17.	170	ug/kg	81		65-122
Benzo(k)fluoranthene	17 U	17.	170	ug/kg	87		67-125
Benzoic acid	170 U	170.	500	ug/kg	97		10-154
Benzyl alcohol	170 U	170.	500	ug/kg	96		68-111
4-Bromophenyl-phenylether	17 U	17.	170	ug/kg	88		79-117
Butylbenzylphthalate	17 U	17.	170	ug/kg	103		75-115
Di-n-butylphthalate	17 U	17.	170	ug/kg	98		79-112
Carbazole	17 U	17.	170	ug/kg	96		77-113
4-Chloro-3-methylphenol	33 U	33.	170	ug/kg	94		74-119
4-Chloroaniline	67 U	67.	170	ug/kg	34		10-110
bis(2-Chloroethoxy)methane	17 U	17.	170	ug/kg	94		70-118
bis(2-Chloroethyl)ether	17 U	17.	170	ug/kg	93		70-104
bis(2-Chloroisopropyl)ether	17 U	17.	170	ug/kg	95		68-131
2-Chloronaphthalene	17 U	17.	170	ug/kg	67		67-127
2-Chlorophenol	17 U	17.	170	ug/kg	94		72-112
4-Chlorophenyl-phenylether	33 U	33.	170	ug/kg	89		79-110
Chrysene	17 U	17.	170	ug/kg	94		76-113
Dibenz(a,h)anthracene	17 U	17.	170	ug/kg	83		70-128
Dibenzofuran	17 U	17.	170	ug/kg	94		79-108
1,2-Dichlorobenzene	17 U	17.	170	ug/kg	85		79-102
1,3-Dichlorobenzene	17 U	17.	170	ug/kg	83		70-98
1,4-Dichlorobenzene	17 U	17.	170	ug/kg	85		74-106
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	54		38-105
2,4-Dichlorophenol	17 U	17.	170	ug/kg	96		75-111
Diethylphthalate	28 U	17.	170	ug/kg	97		76-111
2,4-Dimethylphenol	33 U	33.	170	ug/kg	98		72-111
3,5-Dimethylphenol	33 U	33.	170	ug/kg	96		70-130
Dimethylphthalate	17 U	17.	170	ug/kg	94		77-109
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	80		53-110
2,4-Dinitrophenol	670 U	670.	2,000	ug/kg	72		37-120
2,4-Dinitrotoluene	33 U	33.	170	ug/kg	94		73-115
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	91		79-115

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	102		77-111		
bis(2-Ethylhexyl)phthalate	18 J	17.	330	ug/kg	103		75-117		
Fluoranthene	17 U	17.	170	ug/kg	96		78-116		
Fluorene	17 U	17.	170	ug/kg	94		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	90		78-116		
Hexachlorobutadiene	67 U	67.	170	ug/kg	79		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	72		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	80		68-105		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	82		64-119		
Isophorone	17 U	17.	170	ug/kg	94		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	93		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	85		76-105		
2-Methylphenol	33 U	33.	170	ug/kg	98		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	94		66-117		
Naphthalene	17 U	17.	170	ug/kg	90		73-106		
2-Nitroaniline	17 U	17.	170	ug/kg	93		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	89		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	71		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	90		71-104		
2-Nitrophenol	17 U	17.	170	ug/kg	86		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	87		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	92		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	88		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	95		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	99		68-130		
Pentachlorophenol	170 U	170.	500	ug/kg	72		35-106		
Phenanthrene	17 U	17.	170	ug/kg	94		77-113		
Phenol	17 U	17.	170	ug/kg	92		58-112		
Pyrene	17 U	17.	170	ug/kg	97		75-115		
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	86		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	90		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	89		78-111		
Batch number: 10351SLC026 Sample number(s): 6163869-6163873, 6163876-6163888									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	86		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	90		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	92		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	86		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	87		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	104		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	94		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	85		66-137		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	97		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	94		84-132		
Chrysene	0.33 U	0.33	1.7	ug/kg	92		79-120		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	90		62-142		
Diethylphthalate	6.0 U	6.0	18	ug/kg	104		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	95		70-130		
Bis(2-Ethylhexyl)phthalate	6.3 J	6.0	18	ug/kg	102		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	90		78-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	94		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	90		62-141		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	94		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	90		62-120		
Naphthalene	0.67 U	0.67	1.7	ug/kg	83		67-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	81		39-148		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	90		55-176		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	86		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	94		56-121		
Batch number: 10354SLC026	Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886								
N-Nitrosodimethylamine	16.7 U	16.7	33.3	ng/kg	80		70-130		
Batch number: 10349A34A	Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886								
9a TPH by EPA 8015B Gas C5-C12	0.2 U	0.2	1.0	mg/kg	79	78	67-119	1	30
Batch number: 103550019A	Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886								
4-Amino-2,6-Dinitrotoluene	75 U	75.	150	ug/kg	106		80-120		
2-Amino-4,6-Dinitrotoluene	50 U	50.	150	ug/kg	107		80-120		
2,6-Diamino-4-nitrotoluene	100 U	100.	300	ug/kg	90	89	54-134	2	30
2,4-Diamino-6-nitrotoluene	100 U	100.	300	ug/kg	90	88	54-134	2	30
1,3-Dinitrobenzene	50 U	50.	150	ug/kg	106		51-171		
2,4-Dinitrotoluene	50 U	50.	150	ug/kg	103		72-135		
2,6-Dinitrotoluene	50 U	50.	150	ug/kg	108		80-120		
HMX	130 U	130.	380	ug/kg	83		74-130		
Nitrobenzene	50 U	50.	150	ug/kg	102		80-120		
Nitroglycerin	1,000 U	1,000.	3,000	ug/kg	94		80-120		
2-Nitrotoluene	100 U	100.	150	ug/kg	108		78-128		
3-Nitrotoluene	130 U	130.	150	ug/kg	109		73-127		
4-Nitrotoluene	100 U	100.	150	ug/kg	107		80-120		
PETN	1,000 U	1,000.	3,000	ug/kg	106		80-120		
RDX	63 U	63.	150	ug/kg	106		75-131		
Tetryl	77 U	77.	150	ug/kg	135		70-168		
1,3,5-Trinitrobenzene	50 U	50.	150	ug/kg	121		77-137		
2,4,6-Trinitrotoluene	50 U	50.	150	ug/kg	109		80-120		
Batch number: 103510021A	Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886								
17a Formaldehyde by 8315A	600 U	600.	1,500	ug/kg	100		80-126		
Batch number: 103490003A	Sample number(s): 6163875								
2,4-D	0.16 U	0.16	0.50	ug/l	112	108	45-128	4	30
Dalapon	0.25 U	0.25	1.3	ug/l	92	97	40-100	5	30
2,4-DB	0.30 U	0.30	1.0	ug/l	100	100	41-138	0	30
Dicamba	0.080 U	0.080	0.30	ug/l	108	112	51-144	4	30
Dinoseb	0.10 U	0.10	0.50	ug/l	53	42	23-93	24	30
2,4-DP (Dichlorprop)	0.16 U	0.16	0.50	ug/l	116	116	72-145	0	30
MCPA	300 U	300.	1,000	ug/l	92	72	69-129	24	30
MCPP	50 U	50.	200	ug/l	96	92	66-132	4	30
2,4,5-T	0.015 U	0.015	0.050	ug/l	104	108	53-141	4	30
2,4,5-TP	0.010 U	0.010	0.050	ug/l	100	96	56-135	4	30
Batch number: 103510026A	Sample number(s): 6163878-6163883, 6163887-6163888								
2,4-D	1.2 U	1.2	3.6	ug/kg	118		40-140		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Dalapon	4.4 U	4.4	9.0	ug/kg	83		24-89		
2,4-DB	1.2 J	0.62	1.7	ug/kg	95		34-138		
Dicamba	0.40 U	0.40	1.2	ug/kg	86		20-164		
Dinoseb	0.80 U	0.80	2.4	ug/kg	8*		10-36		
2,4-DP (Dichlorprop)	0.80 U	0.80	1.7	ug/kg	106		60-141		
MCPA	76 U	76.	250	ug/kg	96		34-113		
MCPP (Mecoprop)	160 J	75.	250	ug/kg	112		29-154		
2,4,5-T	0.082 U	0.082	0.17	ug/kg	99		33-145		
2,4,5-TP	0.075 U	0.075	0.17	ug/kg	89		48-138		
Batch number: 103490017A	Sample number(s): 6163879,6163887								
6a Perchlorate EPA 6850	2.1 U	2.1	5.0	ug/kg	98		85-115		
Batch number: 110040016A	Sample number(s): 6163884								
6a Perchlorate EPA 6850	2.1 U	2.1	5.0	ug/kg	105		85-115		
Batch number: 103500016A	Sample number(s): 6163875								
Aldrin	0.0020 U	0.0020	0.010	ug/l	96	101	54-159	5	30
Alpha BHC	0.0030 U	0.0030	0.010	ug/l	101	102	59-146	1	30
Beta BHC	0.0029 U	0.0029	0.010	ug/l	98	101	73-147	3	30
Gamma BHC - Lindane	0.0020 U	0.0020	0.010	ug/l	95	101	68-128	6	30
Chlordane	0.12 U	0.12	0.50	ug/l					
p,p-DDD	0.0050 U	0.0050	0.020	ug/l	100	110	71-139	10	30
p,p-DDE	0.0050 U	0.0050	0.020	ug/l	126	137*	66-130	8	30
p,p-DDT	0.0050 U	0.0050	0.020	ug/l	85	90	53-126	6	30
Delta BHC	0.0029 U	0.0029	0.010	ug/l	103	113	76-148	10	30
Dieldrin	0.0053 U	0.0053	0.020	ug/l	100	100	76-132	0	30
Endosulfan I	0.0043 U	0.0043	0.010	ug/l	78	83	68-128	6	30
Endosulfan II	0.015 U	0.015	0.020	ug/l	90	95	59-144	5	30
Endosulfan Sulfate	0.0058 U	0.0058	0.020	ug/l	95	100	71-142	5	30
Endrin	0.0081 U	0.0081	0.020	ug/l	85	85	52-132	0	30
Endrin Aldehyde	0.020 U	0.020	0.10	ug/l	105	110	68-139	5	20
Endrin Ketone	0.0050 U	0.0050	0.020	ug/l	90	105	69-146	15	30
Heptachlor	0.0026 U	0.0026	0.010	ug/l	93	102	57-126	9	30
Heptachlor Epoxide	0.0023 U	0.0023	0.010	ug/l	98	102	73-156	4	30
Methoxychlor	0.030 U	0.030	0.10	ug/l	91	97	52-133	6	30
Mirex	0.085 U	0.085	0.25	ug/l					
Toxaphene	1.0 U	1.0	3.0	ug/l					
Batch number: 103500017A	Sample number(s): 6163875								
Aroclor 5432	0.10 U	0.10	0.50	ug/l					
Aroclor 5442	0.10 U	0.10	0.50	ug/l	58*	56*	75-125	4	30
Aroclor 5460	0.10 U	0.10	0.50	ug/l					
PCB-1016	0.10 U	0.10	0.50	ug/l	102	100	68-119	2	30
PCB-1221	0.10 U	0.10	0.50	ug/l					
PCB-1232	0.20 U	0.20	0.50	ug/l					
PCB-1242	0.10 U	0.10	0.50	ug/l					
PCB-1248	0.10 U	0.10	0.50	ug/l					
PCB-1254	0.10 U	0.10	0.50	ug/l					
PCB-1260	0.10 U	0.10	0.50	ug/l	112	112	68-121	0	30
PCB-1262	0.20 U	0.20	0.50	ug/l					
PCB-1268	0.16 U	0.16	0.50	ug/l					
Batch number: 103510032A	Sample number(s): 6163869-6163873,6163876-6163888								
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	60*	60*	75-125	0	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

<u>Analysis Name</u>	<u>Blank Result</u>		<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
PCB-1016	0.33	U	0.33	1.7	ug/kg	86		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	101		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					

Batch number: 103550006A

Sample number(s): 6163878-6163883, 6163887-6163888

Aldrin	0.066	U	0.066	0.17	ug/kg	61		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	58		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	78		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	76		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	92		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	102		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	126		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	84		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	99		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	94		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	110		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	108		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	123		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	58		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	106		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	85		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	84		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	131*		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					

Batch number: 103500005A

Sample number(s): 6163869-6163870, 6163876

Ethanol	100	U	100.	500	ug/kg	96		75-112		
Isopropanol	100	U	100.	500	ug/kg	93		75-125		
Methanol	110	U	100.	500	ug/kg	101		75-134		

Batch number: 103510008A

Sample number(s): 6163880

Ethanol	100	U	100.	500	ug/kg	91		75-112		
Isopropanol	100	U	100.	500	ug/kg	87		75-125		
Methanol	100	U	100.	500	ug/kg	96		75-134		

Batch number: 103540002A

Sample number(s): 6163871-6163873, 6163877, 6163884-6163886

Ethanol	100	U	100.	500	ug/kg	87		75-112		
Isopropanol	100	U	100.	500	ug/kg	90		75-125		
Methanol	100	U	100.	500	ug/kg	78		75-134		

Batch number: 103550026A

Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	99		75-125		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	102		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	98		75-125		
Batch number: 103511026001A	Sample number(s): 6163869-6163874, 6163876-6163888								
Antimony	0.0600 U	0.0600	0.200	mg/kg	107		11-208		
Arsenic	0.0600 U	0.0600	0.400	mg/kg	95		80-120		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	98		82-118		
Cadmium	0.0360 U	0.0360	0.100	mg/kg	92		82-118		
Chromium	0.120 U	0.120	0.400	mg/kg	98		80-120		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	92		82-118		
Copper	0.0660 U	0.0660	0.400	mg/kg	105		80-120		
Lead	0.0104 U	0.0104	0.200	mg/kg	95		80-120		
Nickel	0.100 U	0.100	0.400	mg/kg	98		80-120		
Silver	0.0120 U	0.0120	0.100	mg/kg	95		66-134		
Thallium	0.0300 U	0.0300	0.100	mg/kg	101		81-119		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	90		90-110		
Zinc	0.560 U	0.560	3.00	mg/kg	97		78-122		
Batch number: 103511026001B	Sample number(s): 6163869-6163874, 6163876-6163888								
Selenium	0.0400 U	0.0400	0.400	mg/kg	99		79-122		
Batch number: 103511026001C	Sample number(s): 6163869-6163874, 6163876-6163888								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	105		78-122		
Batch number: 103511026001D	Sample number(s): 6163869-6163874, 6163876-6163888								
Barium	0.108 U	0.108	0.400	mg/kg	98		79-121		
Batch number: 103515708003	Sample number(s): 6163869-6163874, 6163876-6163888								
Aluminum	5.03 U	5.03	20.0	mg/kg	93		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	91		78-110		
Calcium	6.13 U	6.13	20.0	mg/kg	98		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	106		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	102		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	98		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	104		81-119		
Phosphorus	1.63 J	0.560	10.0	mg/kg	105		80-120		
Potassium	18.0 U	18.0	50.0	mg/kg	97		78-110		
Sodium	37.3 U	37.3	100	mg/kg	95		87-110		
Strontium	0.0620 U	0.0620	0.500	mg/kg	101		79-121		
Tin	1.28 J	1.00	10.0	mg/kg	105		90-114		
Titanium	0.380 U	0.380	1.00	mg/kg	102		80-120		
Zirconium	0.840 U	0.840	5.00	mg/kg	100		80-120		
Batch number: 103515711002	Sample number(s): 6163869-6163874, 6163876-6163888								
Mercury	0.0028 U	0.0028	0.0976	mg/kg	94		88-123		
Batch number: 103545713001	Sample number(s): 6163875								
Mercury	0.000050 U	0.00005	0.00020	mg/l	97		80-120		
Batch number: 103551848003	Sample number(s): 6163875								
Aluminum	0.0834 U	0.0834	0.200	mg/l	96	92	90-112	4	20
Boron	0.0138 U	0.0138	0.0500	mg/l	97	94	90-110	3	20
Calcium	0.0960 J	0.0702	0.200	mg/l	102	99	90-112	3	20
Iron	0.0522 U	0.0522	0.200	mg/l	102	98	90-112	4	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	100	98	80-120	2	20
Magnesium	0.0421 J	0.0172	0.100	mg/l	101	98	89-110	3	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Manganese	0.00084 U	0.00084	0.0050	mg/l	103	101	90-110	3	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	104	102	80-120	2	20
Potassium	0.239 U	0.239	0.500	mg/l	100	99	85-115	2	20
Sodium	0.433 U	0.433	1.00	mg/l	100	100	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	100	97	90-110	3	20
Tin	0.0098 U	0.0098	0.0200	mg/l	103	101	90-110	2	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	105	102	90-113	3	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	99	80-120	3	20

Batch number: 103556050002A	Sample number(s): 6163875								
Antimony	0.00030 U	0.00030	0.0010	mg/l	105	110	87-110	5	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	99	106	86-111	7	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	108	103	90-112	5	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	105	110	90-114	5	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	98	102	90-118	4	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	101	104	80-120	3	20
Copper	0.00038 U	0.00038	0.0020	mg/l	104	104	90-113	0	20
Lead	0.000052 U	0.00005	0.0010	mg/l	105	107	90-115	2	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	107	109	90-113	2	20
Silver	0.000080 U	0.00008	0.00050	mg/l	107	108	90-115	2	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	101	101	89-116	0	20
Vanadium	0.00016 U	0.00016	0.00050	mg/l	104	108	80-120	4	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	109	105	80-120	4	20
Batch number: 103556050002B	Sample number(s): 6163875								
Selenium	0.00025 U	0.00025	0.0020	mg/l	107	107	85-114	0	20
Batch number: 103556050002C	Sample number(s): 6163875								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	106	103	80-120	2	20
Batch number: 103556050002D	Sample number(s): 6163875								
Barium	0.00038 U	0.00038	0.0020	mg/l	107	106	88-113	1	20
Batch number: 10348113001A	Sample number(s): 6163875								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	110	112*	90-110	2	20
Batch number: 10350196902A	Sample number(s): 6163875								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	100	100	90-110	0	20
Batch number: 10352658701A	Sample number(s): 6163875								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	90	91	85-115	1	20
Batch number: 10361102201A	Sample number(s): 6163869, 6163871-6163872, 6163874								
21a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	101		80-120		
Batch number: 10361102202A	Sample number(s): 6163870, 6163876-6163877, 6163880, 6163884-6163886								
21a Cyanide by 9012B	0.13 U	0.13	0.50	mg/kg	105		80-120		
Batch number: 10364243201A	Sample number(s): 6163869-6163872, 6163874, 6163876-6163888								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	97		80-120		
Batch number: 11001001201A	Sample number(s): 6163869-6163872, 6163874, 6163876-6163882								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	104		85-115		
Batch number: 11001001201B	Sample number(s): 6163883-6163888								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	104		85-115		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11004004201A	Sample number(s): 6163869-6163872, 6163874, 6163876-6163882								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	110		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	109		90-110		
Batch number: 11004004201B	Sample number(s): 6163883-6163888								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	110		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	109		90-110		
Batch number: 10350039401A	Sample number(s): 6163869-6163871, 6163874, 6163876-6163881								
22a pH by 9045C					100		95-105		
Batch number: 10350039401B	Sample number(s): 6163882-6163888								
22a pH by 9045C					100		95-105		
Batch number: 10350182101A	Sample number(s): 6163869-6163871, 6163874, 6163876-6163881								
Oxidation Reduction Potential					100		98-102		
Batch number: 10350182101B	Sample number(s): 6163882-6163888								
Oxidation Reduction Potential					100		98-102		
Batch number: 10351020001A	Sample number(s): 6163875								
22b pH by 9040B					100		99-101		
Batch number: 10349162402B	Sample number(s): 6163878-6163879, 6163881-6163883, 6163887-6163888								
28a Moisture Content by 160.3					100		80-120		
Batch number: 10364162402B	Sample number(s): 6163869-6163874, 6163876-6163877, 6163880, 6163884-6163886								
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: B103482AA	Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163885 UNSPK: 6163871								
Acetone	169	181	15-210	3	30				
Benzene	99	95	55-143	8	30				
Bromobenzene	87	77	43-139	16	30				
Bromochloromethane	97	91	60-137	10	30				
Bromodichloromethane	96	90	53-136	10	30				
Bromoform	85	81	38-124	9	30				
Bromomethane	72	64	42-168	16	30				
2-Butanone	114	120	37-163	1	30				
n-Butylbenzene	82	67	30-146	24	30				
sec-Butylbenzene	87	73	33-157	21	30				
tert-Butylbenzene	88	74	41-152	20	30				
Carbon Tetrachloride	102	96	45-153	10	30				
Chlorobenzene	92	83	49-135	15	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chloroethane	78	68	39-152	18	30				
2-Chloroethyl Vinyl Ether	84	89	32-139	2	30				
Chloroform	103	96	61-142	10	30				
Chloromethane	77	72	51-163	10	30				
2-Chlorotoluene	89	77	42-146	18	30				
4-Chlorotoluene	88	75	39-145	19	30				
Chlorotrifluoroethene	104	104	70-130	2	30				
1,2-Dibromo-3-chloropropane	79	77	30-139	7	30				
Dibromochloromethane	93	88	51-128	10	30				
1,2-Dibromoethane	88	86	54-129	6	30				
Dibromomethane	94	90	57-130	8	30				
1,2-Dichlorobenzene	83	71	36-133	19	30				
1,3-Dichlorobenzene	81	69	34-134	19	30				
1,4-Dichlorobenzene	82	70	35-136	19	30				
Dichlorodifluoromethane	53	50	26-151	11	30				
1,1-Dichloroethane	101	96	63-142	9	30				
1,2-Dichloroethane	98	94	68-131	8	30				
1,1-Dichloroethene	101	97	61-149	7	30				
cis-1,2-Dichloroethene	98	93	60-136	9	30				
trans-1,2-Dichloroethene	99	92	59-142	11	30				
1,2-Dichloropropane	98	93	62-135	9	30				
1,3-Dichloropropane	94	90	58-129	8	30				
2,2-Dichloropropane	96	92	53-147	8	30				
1,1-Dichloropropene	97	93	54-145	8	30				
cis-1,3-Dichloropropene	85	83	51-131	6	30				
trans-1,3-Dichloropropene	87	83	49-129	8	30				
Ethylbenzene	92	83	44-141	15	30				
Freon 113	102	95	56-156	11	30				
Freon 133a	90	94	70-130	6	30				
Hexachlorobutadiene	65	51	10-155	28	30				
2-Hexanone	76	80	32-160	0	30				
Isopropylbenzene	89	78	38-144	17	30				
p-Isopropyltoluene	85	71	29-152	21	30				
Methyl Tertiary Butyl Ether	88	87	55-129	4	30				
4-Methyl-2-pentanone	66	70	46-139	3	30				
Methylene Chloride	99	87	61-141	16	30				
n-Propylbenzene	92	80	39-157	17	30				
Styrene	89	79	35-134	16	30				
1,1,1,2-Tetrachloroethane	97	87	52-130	15	30				
1,1,2,2-Tetrachloroethane	90	87	40-152	7	30				
Tetrachloroethene	94	84	42-149	14	30				
Toluene	97	90	50-146	11	30				
1,2,3-Trichlorobenzene	60	50	10-140	21	30				
1,2,4-Trichlorobenzene	61	50	10-136	24	30				
1,1,1-Trichloroethane	101	95	64-142	9	30				
1,1,2-Trichloroethane	93	89	54-139	9	30				
Trichloroethene	95	90	53-144	9	30				
Trichlorofluoromethane	88	81	47-163	12	30				
1,2,3-Trichloropropane	90	88	45-154	5	30				
1,2,4-Trimethylbenzene	89	76	37-149	19	30				
1,3,5-Trimethylbenzene	89	77	38-150	18	30				
Vinyl Chloride	78	74	50-154	9	30				
m+p-Xylene	93	82	44-137	16	30				

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup</u> <u>RPD</u> <u>Max</u>
o-Xylene	88	78	42-137	16	30				
Batch number: B103501AA	Sample number(s): 6163886 UNSPK: P164946								
Acetone	176		15-210						
Benzene	108		55-143						
Bromobenzene	92		43-139						
Bromochloromethane	98		60-137						
Bromodichloromethane	99		53-136						
Bromoform	87		38-124						
Bromomethane	80		42-168						
2-Butanone	125		37-163						
n-Butylbenzene	100		30-146						
sec-Butylbenzene	100		33-157						
tert-Butylbenzene	94		41-152						
Carbon Tetrachloride	108		45-153						
Chlorobenzene	99		49-135						
Chloroethane	86		39-152						
2-Chloroethyl Vinyl Ether	90		32-139						
Chloroform	106		61-142						
Chloromethane	101		51-163						
2-Chlorotoluene	97		42-146						
4-Chlorotoluene	97		39-145						
1,2-Dibromo-3-chloropropane	78		30-139						
Dibromochloromethane	94		51-128						
1,2-Dibromoethane	92		54-129						
Dibromomethane	97		57-130						
1,2-Dichlorobenzene	94		36-133						
1,3-Dichlorobenzene	92		34-134						
1,4-Dichlorobenzene	93		35-136						
Dichlorodifluoromethane	83		26-151						
1,1-Dichloroethane	108		63-142						
1,2-Dichloroethane	103		68-131						
1,1-Dichloroethene	114		61-149						
cis-1,2-Dichloroethene	105		60-136						
trans-1,2-Dichloroethene	109		59-142						
1,2-Dichloropropane	104		62-135						
1,3-Dichloropropane	97		58-129						
2,2-Dichloropropane	101		53-147						
1,1-Dichloropropene	108		54-145						
cis-1,3-Dichloropropene	91		51-131						
trans-1,3-Dichloropropene	88		49-129						
Ethylbenzene	101		44-141						
Freon 113	115		56-156						
Hexachlorobutadiene	88		10-155						
2-Hexanone	78		32-160						
Isopropylbenzene	100		38-144						
p-Isopropyltoluene	99		29-152						
Methyl Tertiary Butyl Ether	93		55-129						
4-Methyl-2-pentanone	68		46-139						
Methylene Chloride	101		61-141						
n-Propylbenzene	104		39-157						
Styrene	99		35-134						
1,1,1,2-Tetrachloroethane	99		52-130						

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,1,2,2-Tetrachloroethane	87		40-152						
Tetrachloroethene	101		42-149						
Toluene	104		50-146						
1,2,3-Trichlorobenzene	80		10-140						
1,2,4-Trichlorobenzene	81		10-136						
1,1,1-Trichloroethane	107		64-142						
1,1,2-Trichloroethane	95		54-139						
Trichloroethene	103		53-144						
Trichlorofluoromethane	94		47-163						
1,2,3-Trichloropropane	85		45-154						
1,2,4-Trimethylbenzene	98		37-149						
1,3,5-Trimethylbenzene	99		38-150						
Vinyl Chloride	91		50-154						
m+p-Xylene	102		44-137						
o-Xylene	96		42-137						

Batch number: E103493AA

Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886 UNSPK: 6163871

1,4-Dioxane 104 95 70-130 9 30

Batch number: 10351SLB026

Sample number(s): 6163869-6163873, 6163876-6163888 UNSPK: 6163871

Acenaphthene	96	83	75-115	15	30
Acenaphthylene	98	85	49-126	15	30
Aniline	58	44	14-114	27	30
Anthracene	96	85	75-115	13	30
Benzidine	38	23*	35-141	46*	30
Benzo(a)anthracene	94	83	65-122	12	30
Benzo(a)pyrene	87	75	57-126	15	30
Benzo(b)fluoranthene	88	69	59-125	24	30
Benzo(g,h,i)perylene	82	72	59-127	14	30
Benzo(k)fluoranthene	89	82	56-132	8	30
Benzoic acid	63	47	10-173	29	30
Benzyl alcohol	97	88	55-123	10	30
4-Bromophenyl-phenylether	91	80	67-129	13	30
Butylbenzylphthalate	106	89	73-134	18	30
Di-n-butylphthalate	101	86	67-123	16	30
Carbazole	98	86	64-120	13	30
4-Chloro-3-methylphenol	96	85	53-130	12	30
4-Chloroaniline	43	37	23-95	14	30
bis(2-Chloroethoxy)methane	93	84	54-117	10	30
bis(2-Chloroethyl)ether	95	85	60-116	11	30
bis(2-Chloroisopropyl)ether	98	88	55-142	11	30
2-Chloronaphthalene	94	83	50-141	12	30
2-Chlorophenol	97	88	73-121	10	30
4-Chlorophenyl-phenylether	95	79	64-119	17	30
Chrysene	98	85	62-128	14	30
Dibenz(a,h)anthracene	83	73	65-125	13	30
Dibenzofuran	97	84	71-112	14	30
1,2-Dichlorobenzene	88	81	66-108	8	30
1,3-Dichlorobenzene	85	78	63-109	9	30
1,4-Dichlorobenzene	87	78	53-113	10	30
3,3'-Dichlorobenzidine	37	32	25-123	13	30
2,4-Dichlorophenol	99	88	78-117	12	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Diethylphthalate	98	84	66-118	15	30				
2,4-Dimethylphenol	98	87	56-130	12	30				
3,5-Dimethylphenol	101	91	70-130	10	30				
Dimethylphthalate	97	83	64-118	16	30				
4,6-Dinitro-2-methylphenol	78	62	10-148	22	30				
2,4-Dinitrophenol	53	37	20-143	35*	30				
2,4-Dinitrotoluene	97	84	57-114	15	30				
2,6-Dinitrotoluene	97	82	69-123	17	30				
1,2-Diphenylhydrazine	103	90	71-129	14	30				
bis(2-Ethylhexyl)phthalate	103	88	63-122	15	30				
Fluoranthene	98	86	59-122	13	30				
Fluorene	97	84	60-125	14	30				
Hexachlorobenzene	92	80	61-111	14	30				
Hexachlorobutadiene	81	73	62-120	10	30				
Hexachlorocyclopentadiene	72	61	10-153	17	30				
Hexachloroethane	84	74	57-109	13	30				
Indeno(1,2,3-cd)pyrene	83	72	61-126	14	30				
Isophorone	96	85	51-118	12	30				
1-Methylnaphthalene	94	85	73-112	10	30				
2-Methylnaphthalene	87	79	76-114	10	30				
2-Methylphenol	102	89	47-142	13	30				
4-Methylphenol	97	85	55-126	13	30				
Naphthalene	91	81	72-116	11	30				
2-Nitroaniline	96	83	67-125	15	30				
3-Nitroaniline	90	79	59-122	13	30				
4-Nitroaniline	74	63	52-112	16	30				
Nitrobenzene	92	83	51-114	11	30				
2-Nitrophenol	89	78	74-115	13	30				
4-Nitrophenol	92	77	39-133	17	30				
N-Nitroso-di-n-propylamine	95	84	60-116	12	30				
N-Nitrosodimethylamine	94	85	47-116	10	30				
N-Nitrosodiphenylamine	97	86	86-145	13	30				
Di-n-octylphthalate	104	85	56-126	20	30				
Pentachlorophenol	69	59	17-149	17	30				
Phenanthrene	97	84	65-125	14	30				
Phenol	95	85	58-126	11	30				
Pyrene	101	87	51-151	16	30				
1,2,4-Trichlorobenzene	87	79	72-115	9	30				
2,4,5-Trichlorophenol	91	78	34-139	16	30				
2,4,6-Trichlorophenol	94	77	49-140	20	30				
Batch number: 10351SLC026 Sample number(s): 6163869-6163873, 6163876-6163888 UNSPK: 6163871									
Acenaphthene	84	87	63-105	3	30				
Acenaphthylene	90	95	55-126	5	30				
Anthracene	94	97	46-136	3	30				
Benzo(a)anthracene	90	93	39-144	3	30				
Benzo(a)pyrene	87	92	34-156	5	30				
Benzo(b)fluoranthene	102	105	43-155	3	30				
Benzo(g,h,i)perylene	47	51	33-141	8	30				
Benzo(k)fluoranthene	93	96	42-144	3	30				
Butylbenzylphthalate	104	103	73-140	1	30				
Di-n-butylphthalate	103	105	78-160	2	30				
Chrysene	90	93	29-156	3	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dibenz(a,h)anthracene	56	60	41-130	5	30				
Diethylphthalate	107	112	87-131	5	30				
Dimethylphthalate	96	100	74-118	5	30				
Bis(2-Ethylhexyl)phthalate	91	90	39-167	1	30				
Fluoranthene	101	104	26-166	3	30				
Fluorene	92	95	45-121	3	30				
Indeno(1,2,3-cd)pyrene	54	57	21-143	5	30				
1-Methylnaphthalene	86	88	72-123	2	30				
2-Methylnaphthalene	81	82	28-121	1	30				
Naphthalene	82	84	61-102	1	30				
N-Nitrosodimethylamine	79	80	48-113	1	30				
Di-n-octylphthalate	115	115	40-192	1	30				
Phenanthrene	86	87	12-165	1	30				
Pyrene	84	88	15-153	5	30				
Batch number: 10354SLC026	Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886 UNSPK: 6163871								
N-Nitrosodimethylamine	76	66*	70-130	13	30				
Batch number: 10349A34A	Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886 UNSPK: 6163871								
9a TPH by EPA 8015B Gas C5-C12	65	66	39-118	0	30				
Batch number: 103550019A	Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886 UNSPK: 6163871								
4-Amino-2,6-Dinitrotoluene	106	107	80-127	1	50				
2-Amino-4,6-Dinitrotoluene	105	105	80-137	0	50				
1,3-Dinitrobenzene	103	103	38-166	1	50				
2,4-Dinitrotoluene	100	101	80-131	0	50				
2,6-Dinitrotoluene	107	107	80-127	0	50				
HMX	81	83	63-128	2	50				
Nitrobenzene	100	100	80-125	0	50				
Nitroglycerin	94	93	80-120	0	50				
2-Nitrotoluene	106	105	80-122	1	50				
3-Nitrotoluene	107	106	72-119	1	50				
4-Nitrotoluene	106	106	80-125	0	50				
PETN	108	107	80-121	0	50				
RDX	97	99	75-129	2	50				
Tetryl	131	135	55-174	3	50				
1,3,5-Trinitrobenzene	118	119	82-126	0	50				
2,4,6-Trinitrotoluene	106	107	82-130	1	50				
Batch number: 103510021A	Sample number(s): 6163869-6163873, 6163876-6163877, 6163880, 6163884-6163886 UNSPK: 6163871								
17a Formaldehyde by 8315A	97	99	80-120	2	50				
Batch number: 103510026A	Sample number(s): 6163878-6163883, 6163887-6163888 UNSPK: 6163878								
2,4-D	140	79	28-161	56*	35				
Dalapon	47	100*	12-86	72*	50				
2,4-DB	188*	166	20-170	12	50				
Dicamba	5*	5*	33-120	0	50				
Dinoseb	41	44	1-44	8	35				
2,4-DP (Dichlorprop)	124	115	55-141	7	50				

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Quality Control Summary

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Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
MCPA	232*	199*	31-184	15	50				
MCPP (Mecoprop)	102	89	16-174	10	50				
2,4,5-T	40	51	25-132	24	35				
2,4,5-TP	107	102	10-183	5	35				
Batch number: 103490017A	Sample number(s): 6163879,6163887 UNSPK: P162864								
6a Perchlorate EPA 6850	103	107	80-120	4	20				
Batch number: 110040016A	Sample number(s): 6163884 UNSPK: P167468								
6a Perchlorate EPA 6850	110	110	80-120	0	20				
Batch number: 103510032A	Sample number(s): 6163869-6163873,6163876-6163888 UNSPK: 6163871								
PCB-1016	102	111	29-146	9	50				
PCB-1260	114	115	39-149	1	50				
Batch number: 103550006A	Sample number(s): 6163878-6163883,6163887-6163888 UNSPK: P166190								
Aldrin	71	77	16-126	9	50				
Alpha BHC	88	94	10-129	7	50				
Beta BHC	84	100	14-147	17	50				
Gamma BHC - Lindane	94	100	10-140	6	50				
p,p-DDD	76	68	16-163	12	50				
p,p-DDE	106	111	18-161	4	50				
p,p-DDT	101	104	10-176	3	50				
Delta BHC	88	94	23-140	7	50				
Dieldrin	73	78	19-154	8	50				
Endosulfan I	76	79	16-137	4	50				
Endosulfan II	76	81	28-154	6	50				
Endosulfan Sulfate	133	86	21-160	43	50				
Endrin	95	86	11-149	10	50				
Endrin Aldehyde	47	73	10-148	43*	35				
Endrin Ketone	102	92	22-165	10	50				
Heptachlor	106	112	13-126	6	50				
Heptachlor Epoxide	77	81	13-157	4	50				
Methoxychlor	96	108	32-147	12	50				
Batch number: 103500005A	Sample number(s): 6163869-6163870,6163876 UNSPK: P163871								
Ethanol	83	83	24-143	0	20				
Isopropanol	84	82	75-125	3	20				
Methanol	74	86	45-136	14	20				
Batch number: 103510008A	Sample number(s): 6163880 UNSPK: 6163880								
Ethanol	81	72	24-143	12	20				
Isopropanol	86	84	75-125	2	20				
Methanol	90	80	45-136	12	20				
Batch number: 103540002A	Sample number(s): 6163871-6163873,6163877,6163884-6163886 UNSPK: 6163871								
Ethanol	82	84	24-143	3	20				
Isopropanol	84	85	75-125	1	20				
Methanol	75	86	45-136	14	20				
Batch number: 103550026A	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886 UNSPK: 6163871								
m-Terphenyl	90	88	75-125	3	20				

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Quality Control Summary

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Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
o-Terphenyl	93	91	75-125	2	20				
p-Terphenyl	95	93	75-125	2	20				
Batch number: 103511026001A	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Antimony	51*	58*	75-125	11	20	0.241	0.146 J	49* (1)	20
Arsenic	140*	155*	75-125	4	20	6.09	7.02	14	20
Beryllium	114	108	75-125	1	20	0.848	0.852	0	20
Cadmium	129*	138*	75-125	8	20	0.0957 J	0.106	10 (1)	20
Chromium	100	97	75-125	0	20	33.8	36.0	6	20
Cobalt	99	108	75-125	9	20	7.99	8.43	5	20
Copper	96	100	75-125	3	20	10.6	11.4	8	20
Lead	92	67*	75-125	7	20	8.37	8.40	0	20
Nickel	100	102	75-125	1	20	15.1	16.4	8	20
Silver	122	130*	75-125	9	20	0.0302 J	0.0232 J	26* (1)	20
Thallium	112	118	75-125	4	20	0.320	0.325	1 (1)	20
Vanadium	121 (2)	80 (2)	75-125	5	20	67.8	71.1	5	20
Zinc	98 (2)	152 (2)	75-125	7	20	72.0	79.8	10	20
Batch number: 103511026001B	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Selenium	107	114	75-125	7	20	0.265 J	0.235 J	12 (1)	20
Batch number: 103511026001C	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Molybdenum	118	133*	75-125	14	20	0.458	0.573	22* (1)	20
Batch number: 103511026001D	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Barium	63 (2)	102 (2)	75-125	3	20	114	123	8	20
Batch number: 103515708003	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Aluminum	1450 (2)	1167 (2)	75-125	2	20	21,000	18,500	13	20
Boron	94	93	84-115	2	20	6.30	5.83	8 (1)	20
Calcium	-144 (2)	-221 (2)	75-125	5	20	6,500	5,640	14	20
Iron	483 (2)	835 (2)	75-125	1	20	26,200	25,400	3	20
Lithium	96	95	82-114	2	20	25.7	22.1	15	20
Magnesium	-242 (2)	-219 (2)	75-125	1	20	6,230	5,230	18	20
Manganese	167 (2)	180 (2)	75-125	1	20	343	345	1	20
Phosphorus	54*	108	75-125	12	20	371	379	2	20
Potassium	134*	101	75-125	8	20	3,220	2,900	10	20
Sodium	93	93	75-125	1	20	175	156	12 (1)	20
Strontium	96	96	75-115	0	20	28.5	26.1	9	20
Tin	94	93	80-110	2	20	2.03 J	2.06 J	2 (1)	20
Titanium	528 (2)	467 (2)	75-125	4	20	1,090	1,230	12	20
Zirconium	94	94	75-125	1	20	3.38 J	4.05 J	18 (1)	20
Batch number: 103515711002	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Mercury	95	96	65-135	3	20	0.0028 U	0.0028 U	0 (1)	20
Batch number: 10361102201A	Sample number(s): 6163869,6163871-6163872,6163874 UNSPK: 6163871 BKG: 6163871								
21a Cyanide by 9012B	109		75-125			0.18 U	0.17 U	0 (1)	20
Batch number: 10361102202A	Sample number(s): 6163870,6163876-6163877,6163880,6163884-6163886 UNSPK: 6163885								

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Quality Control Summary

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Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
21a Cyanide by 9012B	100	BKG: 6163885	75-125			0.18	U	0.18	U
Batch number: 10364243201A	Sample number(s): 6163869-6163872, 6163874, 6163876-6163888 UNSPK: 6163871 BKG: 6163871								
3a Cr VI by EPA 7199	99		75-125			0.23	J	0.31	J
Batch number: 11001001201A	Sample number(s): 6163869-6163872, 6163874, 6163876-6163882 UNSPK: 6163871 BKG: 6163871								
7a Perchlorate EPA 314.0	93		80-120			9.0	U	9.0	U
Batch number: 11001001201B	Sample number(s): 6163883-6163888 UNSPK: 6163883 BKG: 6163883								
7a Perchlorate EPA 314.0	95		80-120			9.0	U	9.0	U
Batch number: 11004004201A	Sample number(s): 6163869-6163872, 6163874, 6163876-6163882 UNSPK: 6163871 BKG: 6163871								
11a Anions by 300.0 - Fluoride	83		80-120			2.9		2.7	
11a Anions by 300.0 - Nitrate	152*		80-120			11.5		10.3	
Batch number: 11004004201B	Sample number(s): 6163883-6163888 UNSPK: 6163883 BKG: 6163883								
11a Anions by 300.0 - Fluoride	84		80-120			3.7		3.5	
11a Anions by 300.0 - Nitrate	109		80-120			2.1		2.0	
Batch number: 10350039401A	Sample number(s): 6163869-6163871, 6163874, 6163876-6163881 BKG: 6163871								
22a pH by 9045C						8.16		8.16	
Batch number: 10350039401B	Sample number(s): 6163882-6163888 BKG: P164622								
22a pH by 9045C						8.38		8.39	
Batch number: 10350182101A	Sample number(s): 6163869-6163871, 6163874, 6163876-6163881 BKG: 6163871								
Oxidation Reduction Potential						399		394	
Batch number: 10350182101B	Sample number(s): 6163882-6163888 BKG: P164622								
Oxidation Reduction Potential						414		419	
Batch number: 10351020001A	Sample number(s): 6163875 BKG: P165990								
22b pH by 9040B						6.8		6.8	
Batch number: 10349162402B	Sample number(s): 6163878-6163879, 6163881-6163883, 6163887-6163888 BKG: 6163881								
28a Moisture Content by 160.3						8.5		8.8	
Batch number: 10364162402B	Sample number(s): 6163869-6163874, 6163876-6163877, 6163880, 6163884-6163886 BKG: 6163871								
28a Moisture Content by 160.3						11.4		11.7	
28a Moisture Content by 160.3						11.4		11.7	
28a Moisture Content by 160.3						11.4		11.7	

Surrogate Quality Control

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B

Batch number: B103482AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6163869	106	102	97	92
6163870	105	100	99	88
6163871	107	108	96	93
6163872	100	100	102	98
6163873	101	103	101	98
6163876	104	101	97	91
6163877	104	100	97	92
6163880	104	101	100	88
6163884	105	102	97	93
6163885	104	100	98	92
Blank	104	102	96	92
LCS	101	105	100	100
MS	100	100	102	98
MSD	101	103	101	98

Limits: 80-120 80-120 81-117 74-121

Analysis Name: 1a Volatile Organics EPA 8260B

Batch number: B103501AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6163886	105	105	98	93
Blank	104	101	97	93
LCS	100	103	99	100
LCSD	99	102	100	100
MS	100	97	102	101

Limits: 80-120 80-120 81-117 74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM

Batch number: E103491AA

Toluene-d8

6163875	102
Blank	101
LCS	101
LCSD	101

Limits: 80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM

Batch number: E103493AA

Toluene-d8

6163869	101
6163870	100
6163871	100
6163872	101
6163873	100
6163876	102

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Surrogate Quality Control

6163877 101
6163880 100
6163884 100
6163885 101
6163886 99
Blank 99
LCS 99
LCSD 101
MS 101
MSD 100

Limits: 70-130

Analysis Name: 1b Volatile Organics EPA8260

Batch number: Y103512AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6163875	98	96	102	98
Blank	100	98	101	99
LCS	100	101	104	103
LCSD	97	97	103	102

Limits: 86-118 80-120 88-110 86-115

Analysis Name: 4b Select SVOC EPA 8270SIM

Batch number: 10349WAI026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163875	125	90	102
Blank	101	97	108
LCS	103	93	99
LCSD	108	96	102

Limits: 40-130 45-130 45-135

Analysis Name: 5b Semivolatiles by EPA 8270C

Batch number: 10350WAB026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163875	52	34	85	81	82	79
Blank	53	36	81	84	81	83
LCS	59	40	86	85	86	83
LCSD	71	48	103	102	105	99

Limits: 20-130 20-120 30-130 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 10351SLB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163869	95	91	80	83	84	81
6163870	88	85	73	79	79	80
6163871	97	93	85	86	87	87
6163872	95	89	84	85	87	86
6163873	86	82	73	79	77	75
6163876	98	93	77	85	84	85
6163877	98	95	79	88	86	86

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Surrogate Quality Control

6163878	92	89	76	82	81	80
6163879	93	90	77	82	83	81
6163880	96	93	73	84	85	82
6163881	92	89	74	81	84	80
6163882	91	89	73	82	85	78
6163883	84	81	68	77	78	76
6163884	95	92	78	85	89	85
6163885	92	89	75	85	87	81
6163886	91	89	72	82	82	83
6163887	93	91	78	86	88	82
6163888	96	94	81	88	88	87
Blank	91	90	79	85	85	81
LCS	91	88	81	85	85	82
MS	95	89	84	85	87	86
MSD	86	82	73	79	77	75

Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10351SLC026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163869	93	87	107
6163870	89	87	90
6163871	91	84	90
6163872	91	83	87
6163873	93	87	88
6163876	87	82	88
6163877	100	88	98
6163878	100	90	97
6163879	98	89	93
6163880	100	89	92
6163881	100	90	108
6163882	97	85	90
6163883	102	92	98
6163884	103	89	96
6163885	100	89	97
6163886	97	85	94
6163887	104	90	98
6163888	102	90	101
Blank	95	87	98
LCS	92	85	94
MS	91	83	87
MSD	93	87	88

Limits:	40-130	45-130	45-135

Analysis Name: 19a NDMA by 1625C
Batch number: 10354SLC026

N-Nitrosodimethylamine-
d6

6163869	106
6163870	110
6163871	101
6163872	101
6163873	97

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Surrogate Quality Control

6163876	115
6163877	105
6163880	73
6163884	103
6163885	100
6163886	120
Blank	118
LCS	118
MS	101
MSD	97

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 10349A34A
Trifluorotoluene-F

6163869	85
6163870	80
6163871	83
6163872	80
6163873	79
6163876	79
6163877	86
6163880	105
6163884	86
6163885	85
6163886	86
Blank	98
LCS	102
LCSD	99
MS	80
MSD	79

Limits: 61-122

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 103490003A
2,4-Dichlorophenylacetic acid

6163875	87
Blank	86
LCS	96
LCSD	112

Limits: 35-144

Analysis Name: 12b Pesticides by 8081A
Batch number: 103500016A
Tetrachloro-m-xylene Decachlorobiphenyl

6163875	103	69
Blank	103	97
LCS	99	86
LCSD	104	91

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Surrogate Quality Control

Limits: 52-141 40-144

Analysis Name: 8b PCBs/PCTs by 8082

Batch number: 103500017A

Tetrachloro-m-xylene Decachlorobiphenyl

6163875	119	93
Blank	123	119
LCS	117	114
LCSD	120	116

Limits: 30-150 45-120

Analysis Name: 17a Formaldehyde by 8315A

Batch number: 103510021A

Butyraldehyde

6163869	111
6163870	102
6163871	108
6163872	105
6163873	104
6163876	90
6163877	110
6163880	106
6163884	97
6163885	105
6163886	103
Blank	100
LCS	105
MS	105
MSD	104

Limits: 64-126

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 103510026A

2,4-Dichlorophenylacetic
acid

6163878	116
6163879	114
6163880	89
6163881	101
6163882	108
6163883	96
6163887	137
6163888	99
Blank	113
LCS	100
MS	130
MSD	111

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 103510032A

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Surrogate Quality Control

	Tetrachloro-m-xylene	Decachlorobiphenyl
6163869	69	105
6163870	82	97
6163871	118	126*
6163872	101	108
6163873	113	116
6163876	99	112
6163877	92	102
6163878	108	110
6163879	84	88
6163880	99	120
6163881	86	94
6163882	97	98
6163883	103	190*
6163884	91	97
6163885	87	104
6163886	94	100
6163887	109	116
6163888	115	110
Blank	100	106
LCS	91	96
LCSD	93	105
MS	101	108
MSD	113	116

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A
Batch number: 103550006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6163878	66	103
6163879	64	98
6163880	78	101
6163881	73	94
6163882	77	42
6163883	70	70
6163887	71	135*
6163888	66	55
Blank	65	112
LCS	32*	108
MS	68	36
MSD	74	69

Limits: 50-130 20-120

Analysis Name: 20a Energetics by 8330A
Batch number: 103550019A
2-Nitro-m-xylene

6163869	108
6163870	111
6163871	104
6163872	108
6163873	105
6163876	110

*- Outside of specification

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- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Surrogate Quality Control

6163877 107
6163880 108
6163884 107
6163885 120
6163886 106
Blank 112
LCS 105
LCSD 102
MS 108
MSD 105

Limits: 80-146

Analysis Name: 25a Alcohols by 8015B
Batch number: 103500005A
Acetone

6163869 83
6163870 81
6163876 75
Blank 92
LCS 88
MS 77
MSD 76

Limits: 42-138

Analysis Name: 25a Alcohols by 8015B
Batch number: 103510008A
Acetone

6163880 96
Blank 97
LCS 91
MS 97
MSD 97

Limits: 42-138

Analysis Name: 25a Alcohols by 8015B
Batch number: 103540002A
Acetone

6163871 85
6163872 82
6163873 85
6163877 89
6163884 91
6163885 89
6163886 83
Blank 93
LCS 90
MS 82
MSD 85

Limits: 42-138

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/25/11 at 04:47 PM

Group Number: 1225274

Surrogate Quality Control

Analysis Name: 26a Terphenyls by 8015B
Batch number: 103550026A
n-Triacontane-d62

6163869	91
6163870	92
6163871	91
6163872	91
6163873	93
6163876	92
6163877	102
6163880	92
6163884	94
6163885	94
6163886	94
Blank	97
LCS	94
MS	91
MSD	93

Limits: 50-150

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Amended COC

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						AMERICAN CEC																						
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP						Other Instructions and Notes																						
Samplers: (Signature)																												
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-LEH EPA 8015B Mod.	*Merapia EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 808Z	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 900.0	**Formaldehyde EPA 8315A	**h-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9005C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B
SL-007-SA5C-SB-4.0-5.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X
SL-007-SA5C-SB-9.0-10.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X
SL-007-SA5C-SB-9.5	12.13.10	1210	soil	none	5 Encore Samplers	X	X		X		X									X	X	X	X	X	X	X	X	X
SL-071-SA5B-SS-0.0-0.5MS	12.13.10	1009	soil	none	2 x 16 oz. jarS & 2 6" sleeves			X			X	X	X	X	X	X		X	X									MS sample
SL-072-SA5B-SS-0.0-0.5	12.13.10	0948	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-073-SA5B-SS-0.0-0.5	12.13.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-074-SA5B-SS-0.0-0.5	12.13.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-075-SA5B-SS-0.0-0.5	12.13.10	0903	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-076-SA5B-SS-0.0-0.5	12.13.10	0928	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-078-SA5B-SS-0.0-0.5	12.13.10	1110	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-083-SA5B-SS-0.0-0.5	12.13.10	1049	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-084-SA5B-SS-0.0-0.5	12.13.10	1046	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	5 Encore Samplers	X	X		X		X	X	X	X	X	X		X	X									
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar					X										X	X	X	X	X	X	X	X	X
SL-086-SA5B-SS-0.0-0.5	12.13.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-087-SA5B-SS-0.0-0.5	12.13.10	1317	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-089-SA5B-SS-0.0-0.5	12.13.10	1410	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-091-SA5B-SS-0.0-0.5	12.13.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-092-SA5B-SS-0.0-0.5	12.13.10	1327	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-095-SA5B-SS-0.0-0.5	12.13.10	1440	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-103-SA5B-SS-0.0-0.5	12.13.10	1425	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-139-SA5B-SS-0.0-0.5	12.13.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-236-SA5B-SS-0.0-0.5	12.13.10	1310	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X									
SL-301-SA5B-SS-0.0-0.5	12.13.10	0900	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									

13013/1225274/6163869-88

CHAIN OF CUSTODY RECORD

Amended COC

CDM	SSFL AREA IV COLLOCATED SOIL SAMPLING					VOCs EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/60208&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP																													
Samplers: (Signature)																													
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																								
DUP04-SA5B-QC-121310	12.13.10	1015	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									dup	
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	dup	
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	5 Encore Samplers	X	X		X																			dup	
EB01-SA5B-121310	12.13.10	1215	water	none	6-1 liter amber			X						X	X			X	X									rinsate	
EB01-SA5B-121310	12.13.10	1215	water	none	1-500 ml poly							X	X			X									X			rinsate	
EB01-SA5B-121310	12.13.10	1215	water	HNO3	1-500 ml poly						X																	rinsate	
EB01-SA5B-121310	12.13.10	1215	water	HCl	6-40 mL amber VOA vials	X	X																					rinsate	
SED-029-SIV-SD-0.0-0.5	12.13.10	1152	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-030-SIV-SD-0.0-0.5	12.13.10	1113	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-031-SIV-SD-0.0-0.5	12.13.10	0920	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-032-SIV-SD-0.0-0.5	12.13.10	1457	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-033-SIV-SD-0.0-0.5	12.13.10	1540	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-040-SIV-SD-0.0-0.5	12.13.10	1019	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-001-SA5C-SB-4.0-5.0	12.13.10	1608	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X		
SL-001-SA5C-SB-4.5	12.13.10	1604	soil	none	5 Encore Samplers	X	X		X																				
SL-001-SA5C-SB-9.0-10.0	12.13.10	1616	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X		
SL-001-SA5C-SB-9.5	12.13.10	1612	soil	none	5 Encore Samplers	X	X		X																				
SL-003-SA5C-SB-4.0-5.0	12.13.10	1437	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X		
SL-003-SA5C-SB-4.5	12.13.10	1433	soil	none	5 Encore Samplers	X	X		X																				
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	8 x 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	MS sample	
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	4 x 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	MS sample	
SL-006-SA5C-SB-4.5MS	12.13.10	0943	soil	none	15 Encore Samplers	X	X		X																			MS sample	
SL-006-SA5C-SB-9.0-10.0	12.13.10	0955	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X		
SL-006-SA5C-SB-9.5	12.13.10	0953	soil	none	5 Encore Samplers	X	X		X																				
SL-007-SA5B-SS-0.0-0.5	12.13.10	1004	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X											
SL-007-SA5C-SB-4.5	12.13.10	1200	soil	none	5 Encore Samplers	X	X		X																				

SL-007-SA5B-SS-NJM 1/5/11

SL-007-SA5C-SB-4.5 Updated per PB. NJM 1/5/11

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/14/2010

Group Number: 1225277

SDG: DX021

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample DescriptionSL-006-SA5C-SB-9.0-10.0 Soil
DUP13-SA5C-QC-121310 Soil
SL-006-SA5C-SB-4.0-5.0 Soil
SL-006-SA5C-SB-4.0-5.0MS Soil
SL-006-SA5C-SB-4.0-5.0MSD Soil
EB-15-SA5B-121310 Water
SL-007-SA5C-SB-4.0-5.0 Soil
SL-007-SA5C-SB-9.0-10.0 Soil
SL-075-SA5B-SS-0.0-0.5 Soil
SL-077-SA5B-SS-0.0-0.5 Soil
SL-085-SA5B-SS-0.0-0.5 Soil
SL-087-SA5B-SS-0.0-0.5 Soil
SL-095-SA5B-SS-0.0-0.5 Soil
SL-091-SA5B-SS-0.0-0.5 Soil
SL-003-SA5C-SB-4.0-5.0 Soil
SL-001-SA5C-SB-4.0-5.0 Soil
SL-001-SA5C-SB-9.0-10.0 Soil
SED-032-SIV-SD-0.0-0.5 Soil
SED-033-SIV-SD-0.0-0.5 SoilLancaster Labs (LLI) #6163895
6163896
6163897
6163898
6163899
6163900
6163901
6163902
6163903
6163904
6163905
6163906
6163907
6163908
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6163910
6163911
6163912
6163913

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.



Analysis Report

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ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Charles J. Neslund".

Charles J. Neslund
Manager



Analysis Report

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Page 1 of 4

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0691 SDG#: DX021-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0691 SDG#: DX021-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0145 U	0.0145	1.09	1
11031	12378-PeCDD	40321-76-4	0.0346 JBQ	0.0166	5.45	1
11031	123478-HxCDD	39227-28-6	0.0471 JBQ	0.0176	5.45	1
11031	123678-HxCDD	57653-85-7	0.204 JB	0.0182	5.45	1
11031	123789-HxCDD	19408-74-3	0.197 JB	0.0174	5.45	1
11031	1234678-HpCDD	35822-46-9	5.23 JB	0.0326	5.45	1
11031	OCDD	3268-87-9	83.4 B	0.0270	10.9	1
11031	2378-TCDF	51207-31-9	0.0321 JBQ	0.0144	1.09	1
11031	12378-PeCDF	57117-41-6	0.0757 JB	0.00773	5.45	1
11031	23478-PeCDF	57117-31-4	0.137 JBQ	0.00784	5.45	1
11031	123478-HxCDF	70648-26-9	0.163 JB	0.0132	5.45	1
11031	123678-HxCDF	57117-44-9	0.143 JB	0.0107	5.45	1
11031	123789-HxCDF	72918-21-9	0.0937 JB	0.0159	5.45	1
11031	234678-HxCDF	60851-34-5	0.241 JB	0.0124	5.45	1
11031	1234678-HpCDF	67562-39-4	0.955 JB	0.0101	5.45	1
11031	1234789-HpCDF	55673-89-7	0.145 JB	0.0186	5.45	1
11031	OCDF	39001-02-0	1.53 JB	0.0236	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	50	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

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14420 Albemarle Point Place
Suite 210
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Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0691 SDG#: DX021-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0691 SDG#: DX021-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 16:11	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DDP13 SDG#: DX021-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

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Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DDP13 SDG#: DX021-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0165 U	0.0165	1.15	1
11031	12378-PeCDD	40321-76-4	0.0649 JBQ	0.0263	5.73	1
11031	123478-HxCDD	39227-28-6	0.0401 JBQ	0.0172	5.73	1
11031	123678-HxCDD	57653-85-7	0.287 JB	0.0173	5.73	1
11031	123789-HxCDD	19408-74-3	0.447 JB	0.0174	5.73	1
11031	1234678-HpCDD	35822-46-9	1.03 JB	0.0240	5.73	1
11031	OCDD	3268-87-9	8.45 JB	0.0242	11.5	1
11031	2378-TCDF	51207-31-9	0.0368 JB	0.0216	1.15	1
11031	12378-PeCDF	57117-41-6	0.334 JBQ	0.00952	5.73	1
11031	23478-PeCDF	57117-31-4	0.143 JBQ	0.0106	5.73	1
11031	123478-HxCDF	70648-26-9	0.160 JB	0.0174	5.73	1
11031	123678-HxCDF	57117-44-9	0.115 JBQ	0.0138	5.73	1
11031	123789-HxCDF	72918-21-9	0.512 JB	0.0242	5.73	1
11031	234678-HxCDF	60851-34-5	0.237 JBQ	0.0162	5.73	1
11031	1234678-HpCDF	67562-39-4	0.677 JB	0.0109	5.73	1
11031	1234789-HpCDF	55673-89-7	0.139 JBQ	0.0231	5.73	1
11031	OCDF	39001-02-0	0.898 JBQ	0.0275	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	66	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

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Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DDP13 SDG#: DX021-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

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Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DDP13 SDG#: DX021-02FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 17:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0249 JBQ	0.0191	1.13	1
11031	12378-PeCDD	40321-76-4	0.0742 JB	0.0274	5.64	1
11031	123478-HxCDD	39227-28-6	0.0294 JBQ	0.0219	5.64	1
11031	123678-HxCDD	57653-85-7	0.362 JB	0.0227	5.64	1
11031	123789-HxCDD	19408-74-3	0.510 JBQ	0.0223	5.64	1
11031	1234678-HpCDD	35822-46-9	2.54 JB	0.0331	5.64	1
11031	OCDD	3268-87-9	25.4 B	0.0332	11.3	1
11031	2378-TCDF	51207-31-9	0.0498 JBQ	0.0242	1.13	1
11031	12378-PeCDF	57117-41-6	0.294 JB	0.0125	5.64	1
11031	23478-PeCDF	57117-31-4	0.100 JBQ	0.0120	5.64	1
11031	123478-HxCDF	70648-26-9	0.0520 JB	0.0181	5.64	1
11031	123678-HxCDF	57117-44-9	0.0857 JB	0.0166	5.64	1
11031	123789-HxCDF	72918-21-9	0.445 JB	0.0220	5.64	1
11031	234678-HxCDF	60851-34-5	0.0838 JBQ	0.0170	5.64	1
11031	1234678-HpCDF	67562-39-4	0.428 JB	0.0140	5.64	1
11031	1234789-HpCDF	55673-89-7	0.0739 JBQ	0.0249	5.64	1
11031	OCDF	39001-02-0	0.999 JB	0.0328	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 18:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



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Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.7	B	0.0233	1
11031	12378-PeCDD	40321-76-4	116	B	0.0729	1
11031	123478-HxCDD	39227-28-6	117	B	0.0677	1
11031	123678-HxCDD	57653-85-7	119	B	0.0646	1
11031	123789-HxCDD	19408-74-3	120	B	0.0448	1
11031	1234678-HpCDD	35822-46-9	117	B	0.0891	1
11031	OCDD	3268-87-9	250	B	0.0648	1
11031	2378-TCDF	51207-31-9	25.1	B	0.0501	1
11031	12378-PeCDF	57117-41-6	120	B	0.0288	1
11031	23478-PeCDF	57117-31-4	118	B	0.0374	1
11031	123478-HxCDF	70648-26-9	112	B	0.0939	1
11031	123678-HxCDF	57117-44-9	114	B	0.0772	1
11031	123789-HxCDF	72918-21-9	113	B	0.0612	1
11031	234678-HxCDF	60851-34-5	113	B	0.0595	1
11031	1234678-HpCDF	67562-39-4	115	B	0.0781	1
11031	1234789-HpCDF	55673-89-7	115	B	0.0916	1
11031	OCDF	39001-02-0	235	B	0.0833	1

The recoveries of several labeled compounds were low in this sample. However, the recovery of all of the spiked, native compounds were within specifications.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	29	25 - 181
13C12-123478-HxCDD	24	32 - 141
13C12-123678-HxCDD	25	28 - 130
13C12-123789-HxCDD	37	28 - 130
13C12-1234678-HpCDD	34	23 - 140
13C12-OCDD	34	17 - 157
13C12-2378-TCDF	30	24 - 169
13C12-12378-PeCDF	34	24 - 185
13C12-23478-PeCDF	25	21 - 178
13C12-123478-HxCDF	21	26 - 152
13C12-123678-HxCDF	25	26 - 123
13C12-234678-HxCDF	32	28 - 136
13C12-123789-HxCDF	37	29 - 147
13C12-1234678-HpCDF	30	28 - 143
13C12-1234789-HpCDF	31	26 - 138
13C12-OCDF	27	17 - 157
13C12-1278-TCDD (CRS)	18	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
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Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 19:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.8	B	0.0231	1.13	1
11031	12378-PeCDD	40321-76-4	118	B	0.0423	5.64	1
11031	123478-HxCDD	39227-28-6	121	B	0.0344	5.64	1
11031	123678-HxCDD	57653-85-7	118	B	0.0351	5.64	1
11031	123789-HxCDD	19408-74-3	118	B	0.0344	5.64	1
11031	1234678-HpCDD	35822-46-9	125	B	0.0668	5.64	1
11031	OCDD	3268-87-9	314	B	0.0564	11.3	1
11031	2378-TCDF	51207-31-9	24.0	B	0.0312	1.13	1
11031	12378-PeCDF	57117-41-6	120	B	0.0174	5.64	1
11031	23478-PeCDF	57117-31-4	119	B	0.0173	5.64	1
11031	123478-HxCDF	70648-26-9	114	B	0.0429	5.64	1
11031	123678-HxCDF	57117-44-9	114	B	0.0386	5.64	1
11031	123789-HxCDF	72918-21-9	114	B	0.0499	5.64	1
11031	234678-HxCDF	60851-34-5	113	B	0.0410	5.64	1
11031	1234678-HpCDF	67562-39-4	115	B	0.0430	5.64	1
11031	1234789-HpCDF	55673-89-7	114	B	0.0598	5.64	1
11031	OCDF	39001-02-0	231	B	0.0405	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 19:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163900
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DEB15 SDG#: DX021-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	3.48 U	3.48	2.30	1
10915	12378-PeCDD	40321-76-4	2.02 JB	1.28	11.5	1
10915	123478-HxCDD	39227-28-6	0.514 JB	0.440	11.5	1
10915	123678-HxCDD	57653-85-7	1.01 JB	0.449	11.5	1
10915	123789-HxCDD	19408-74-3	0.622 JB	0.496	11.5	1
10915	1234678-HpCDD	35822-46-9	1.77 JBQ	0.456	11.5	1
10915	OCDD	3268-87-9	7.38 JB	0.505	23.0	1
10915	2378-TCDF	51207-31-9	0.355 U	0.355	2.30	1
10915	12378-PeCDF	57117-41-6	0.591 JB	0.334	11.5	1
10915	23478-PeCDF	57117-31-4	0.623 JB	0.289	11.5	1
10915	123478-HxCDF	70648-26-9	1.09 JBQ	0.295	11.5	1
10915	123678-HxCDF	57117-44-9	0.846 JBQ	0.280	11.5	1
10915	123789-HxCDF	72918-21-9	0.654 JB	0.304	11.5	1
10915	234678-HxCDF	60851-34-5	1.13 JB	0.272	11.5	1
10915	1234678-HpCDF	67562-39-4	3.04 JB	0.258	11.5	1
10915	1234789-HpCDF	55673-89-7	0.663 JB	0.290	11.5	1
10915	OCDF	39001-02-0	1.71 JB	0.506	23.0	1

The recoveries of several labeled compounds were outside QC limits in this sample and the blank and OPR associated with this sample. The sample was re-extracted outside the project specified holding time with all labeled compound recoveries within QC specification. Comparable native compound results were observed between the two extractions.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	3	25 - 164
13C12-12378-PeCDD	15	25 - 181
13C12-123478-HxCDD	24	32 - 141
13C12-123678-HxCDD	23	28 - 130
13C12-123789-HxCDD	21	28 - 130
13C12-1234678-HpCDD	30	23 - 140
13C12-OCDD	29	17 - 157
13C12-2378-TCDF	33	24 - 169
13C12-12378-PeCDF	29	24 - 185
13C12-23478-PeCDF	34	21 - 178
13C12-123478-HxCDF	27	26 - 152
13C12-123678-HxCDF	27	26 - 123
13C12-234678-HxCDF	29	28 - 136
13C12-123789-HxCDF	29	29 - 147
13C12-1234678-HpCDF	29	28 - 143
13C12-1234789-HpCDF	29	26 - 138
13C12-OCDF	28	17 - 157
13C12-1278-TCDD (CRS)	9	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

*=This limit was used in the evaluation of the final result

Sample Description: **EB-15-SA5B-121310 Water**
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # **WW 6163900**
LLI Group # **1225277**
Account # **13013**

Project Name: **SSFL Area IV Collocated Soil Sampling**

Collected: 12/13/2010 12:15 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DEB15 SDG#: DX021-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
E	Exceeds calibration range					
C	Confirmed quantitation on secondary GC column					
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	10362001	12/30/2010 17:25	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	10362001	12/28/2010 06:30	Ginelle L Haines	1



Analysis Report

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Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0745 SDG#: DX021-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0745 SDG#: DX021-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0234 U	0.0234	1.09	1
11031	12378-PeCDD	40321-76-4	0.0864 JBQ	0.0310	5.44	1
11031	123478-HxCDD	39227-28-6	0.112 JB	0.0271	5.44	1
11031	123678-HxCDD	57653-85-7	0.321 JBQ	0.0283	5.44	1
11031	123789-HxCDD	19408-74-3	0.285 JB	0.0271	5.44	1
11031	1234678-HpCDD	35822-46-9	5.76 B	0.0404	5.44	1
11031	OCDD	3268-87-9	58.1 B	0.0412	10.9	1
11031	2378-TCDF	51207-31-9	0.0301 U	0.0301	1.09	1
11031	12378-PeCDF	57117-41-6	0.164 JBQ	0.0150	5.44	1
11031	23478-PeCDF	57117-31-4	0.241 JBQ	0.0159	5.44	1
11031	123478-HxCDF	70648-26-9	0.177 JB	0.0220	5.44	1
11031	123678-HxCDF	57117-44-9	0.135 JBQ	0.0183	5.44	1
11031	123789-HxCDF	72918-21-9	0.231 JB	0.0260	5.44	1
11031	234678-HxCDF	60851-34-5	0.247 JBQ	0.0212	5.44	1
11031	1234678-HpCDF	67562-39-4	1.17 JB	0.0161	5.44	1
11031	1234789-HpCDF	55673-89-7	0.246 JB	0.0285	5.44	1
11031	OCDF	39001-02-0	2.06 JB	0.0337	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration



Analysis Report

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Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0745 SDG#: DX021-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0745 SDG#: DX021-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 20:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0791 SDG#: DX021-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0791 SDG#: DX021-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0237 JBQ	0.0225	1.10	1
11031	12378-PeCDD	40321-76-4	0.119 JBQ	0.0322	5.51	1
11031	123478-HxCDD	39227-28-6	0.126 JB	0.0326	5.51	1
11031	123678-HxCDD	57653-85-7	0.557 JB	0.0347	5.51	1
11031	123789-HxCDD	19408-74-3	0.353 JB	0.0331	5.51	1
11031	1234678-HpCDD	35822-46-9	14.7 B	0.0655	5.51	1
11031	OCDD	3268-87-9	179 B	0.0656	11.0	1
11031	2378-TCDF	51207-31-9	0.0249 U	0.0249	1.10	1
11031	12378-PeCDF	57117-41-6	0.0980 JB	0.0144	5.51	1
11031	23478-PeCDF	57117-31-4	0.144 JB	0.0139	5.51	1
11031	123478-HxCDF	70648-26-9	0.116 JB	0.0216	5.51	1
11031	123678-HxCDF	57117-44-9	0.128 JB	0.0195	5.51	1
11031	123789-HxCDF	72918-21-9	0.170 JBQ	0.0240	5.51	1
11031	234678-HxCDF	60851-34-5	0.162 JB	0.0206	5.51	1
11031	1234678-HpCDF	67562-39-4	1.71 JB	0.0163	5.51	1
11031	1234789-HpCDF	55673-89-7	0.194 JB	0.0227	5.51	1
11031	OCDF	39001-02-0	4.77 JB	0.0316	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0791 SDG#: DX021-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					



Analysis Report

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Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0791 SDG#: DX021-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 21:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D7505 SDG#: DX021-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D7505 SDG#: DX021-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0679 JBQ	0.0182	1.06	1
11031	12378-PeCDD	40321-76-4	0.518 JB	0.0419	5.32	1
11031	123478-HxCDD	39227-28-6	0.909 JB	0.0286	5.32	1
11031	123678-HxCDD	57653-85-7	2.30 JB	0.0291	5.32	1
11031	123789-HxCDD	19408-74-3	2.31 JB	0.0298	5.32	1
11031	1234678-HpCDD	35822-46-9	54.7 B	0.0776	5.32	1
11031	OCDD	3268-87-9	502 B	0.0634	10.6	1
11031	2378-TCDF	51207-31-9	0.214 JB	0.0339	1.06	1
11031	12378-PeCDF	57117-41-6	0.378 JB	0.0142	5.32	1
11031	23478-PeCDF	57117-31-4	0.435 JB	0.0145	5.32	1
11031	123478-HxCDF	70648-26-9	0.629 JB	0.0263	5.32	1
11031	123678-HxCDF	57117-44-9	0.613 JB	0.0232	5.32	1
11031	123789-HxCDF	72918-21-9	0.467 JB	0.0317	5.32	1
11031	234678-HxCDF	60851-34-5	0.706 JB	0.0258	5.32	1
11031	1234678-HpCDF	67562-39-4	9.65 B	0.0234	5.32	1
11031	1234789-HpCDF	55673-89-7	0.847 JB	0.0361	5.32	1
11031	OCDF	39001-02-0	25.3 B	0.0284	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D7505 SDG#: DX021-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D7505 SDG#: DX021-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 22:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



Analysis Report

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Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0705 SDG#: DX021-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	7.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0705 SDG#: DX021-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0969 JB	0.0178	1.08	1
11031	12378-PeCDD	40321-76-4	0.290 JB	0.0311	5.38	1
11031	123478-HxCDD	39227-28-6	0.443 JB	0.0297	5.38	1
11031	123678-HxCDD	57653-85-7	0.946 JB	0.0310	5.38	1
11031	123789-HxCDD	19408-74-3	0.884 JB	0.0301	5.38	1
11031	1234678-HpCDD	35822-46-9	21.8 B	0.0487	5.38	1
11031	OCDD	3268-87-9	179 B	0.0531	10.8	1
11031	2378-TCDF	51207-31-9	0.220 JB	0.0263	1.08	1
11031	12378-PeCDF	57117-41-6	0.247 JB	0.0121	5.38	1
11031	23478-PeCDF	57117-31-4	0.329 JB	0.0135	5.38	1
11031	123478-HxCDF	70648-26-9	0.378 JB	0.0250	5.38	1
11031	123678-HxCDF	57117-44-9	0.373 JB	0.0202	5.38	1
11031	123789-HxCDF	72918-21-9	0.236 JB	0.0322	5.38	1
11031	234678-HxCDF	60851-34-5	0.501 JB	0.0237	5.38	1
11031	1234678-HpCDF	67562-39-4	3.96 JB	0.0167	5.38	1
11031	1234789-HpCDF	55673-89-7	0.478 JB	0.0318	5.38	1
11031	OCDF	39001-02-0	7.92 JB	0.0316	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	50	17 - 157
13C12-1278-TCDD (CRS)	67	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0705 SDG#: DX021-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0705 SDG#: DX021-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 02:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



Analysis Report

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Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8505 SDG#: DX021-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8505 SDG#: DX021-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0844 JBQ	0.0232	1.07	1
11031	12378-PeCDD	40321-76-4	0.208 JB	0.0683	5.36	1
11031	123478-HxCDD	39227-28-6	0.301 JBQ	0.0415	5.36	1
11031	123678-HxCDD	57653-85-7	1.32 JB	0.0437	5.36	1
11031	123789-HxCDD	19408-74-3	0.836 JB	0.0432	5.36	1
11031	1234678-HpCDD	35822-46-9	37.3 B	0.0943	5.36	1
11031	OCDD	3268-87-9	432 B	0.0650	10.7	1
11031	2378-TCDF	51207-31-9	0.197 JB	0.0430	1.07	1
11031	12378-PeCDF	57117-41-6	0.774 JB	0.0205	5.36	1
11031	23478-PeCDF	57117-31-4	0.517 JB	0.0200	5.36	1
11031	123478-HxCDF	70648-26-9	0.720 JB	0.0294	5.36	1
11031	123678-HxCDF	57117-44-9	0.939 JB	0.0270	5.36	1
11031	123789-HxCDF	72918-21-9	0.353 JB	0.0331	5.36	1
11031	234678-HxCDF	60851-34-5	0.544 JB	0.0278	5.36	1
11031	1234678-HpCDF	67562-39-4	7.20 B	0.0323	5.36	1
11031	1234789-HpCDF	55673-89-7	0.641 JB	0.0417	5.36	1
11031	OCDF	39001-02-0	16.1 B	0.0422	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	59	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	68	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8505 SDG#: DX021-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8505 SDG#: DX021-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 03:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8705 SDG#: DX021-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8705 SDG#: DX021-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0365 JB	0.0227	1.09	1
11031	12378-PeCDD	40321-76-4	0.0840 JB	0.0467	5.46	1
11031	123478-HxCDD	39227-28-6	0.163 JBQ	0.0416	5.46	1
11031	123678-HxCDD	57653-85-7	0.983 JB	0.0426	5.46	1
11031	123789-HxCDD	19408-74-3	0.485 JB	0.0414	5.46	1
11031	1234678-HpCDD	35822-46-9	30.1 B	0.0838	5.46	1
11031	OCDD	3268-87-9	322 B	0.0683	10.9	1
11031	2378-TCDF	51207-31-9	0.196 JB	0.0366	1.09	1
11031	12378-PeCDF	57117-41-6	0.489 JB	0.0191	5.46	1
11031	23478-PeCDF	57117-31-4	0.386 JB	0.0183	5.46	1
11031	123478-HxCDF	70648-26-9	0.462 JB	0.0252	5.46	1
11031	123678-HxCDF	57117-44-9	0.319 JB	0.0236	5.46	1
11031	123789-HxCDF	72918-21-9	0.223 JB	0.0289	5.46	1
11031	234678-HxCDF	60851-34-5	0.426 JB	0.0249	5.46	1
11031	1234678-HpCDF	67562-39-4	4.08 JB	0.0553	5.46	1
11031	1234789-HpCDF	55673-89-7	0.527 JBQ	0.0763	5.46	1
11031	OCDF	39001-02-0	10.4 JB	0.0502	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	69	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8705 SDG#: DX021-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8705 SDG#: DX021-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 04:39	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9505 SDG#: DX021-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9505 SDG#: DX021-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.282 JB	0.0499	1.05	1
11031	12378-PeCDD	40321-76-4	0.369 JBQ	0.0901	5.26	1
11031	123478-HxCDD	39227-28-6	0.492 JBQ	0.0721	5.26	1
11031	123678-HxCDD	57653-85-7	1.84 JB	0.0747	5.26	1
11031	123789-HxCDD	19408-74-3	1.04 JB	0.0712	5.26	1
11031	1234678-HpCDD	35822-46-9	54.9 B	0.151	5.26	1
11031	OCDD	3268-87-9	574 B	0.117	10.5	1
11031	2378-TCDF	51207-31-9	0.146 JBQ	0.0601	1.05	1
11031	12378-PeCDF	57117-41-6	0.515 JB	0.0322	5.26	1
11031	23478-PeCDF	57117-31-4	0.503 JB	0.0312	5.26	1
11031	123478-HxCDF	70648-26-9	0.509 JB	0.0508	5.26	1
11031	123678-HxCDF	57117-44-9	0.603 JB	0.0458	5.26	1
11031	123789-HxCDF	72918-21-9	0.532 JB	0.0553	5.26	1
11031	234678-HxCDF	60851-34-5	0.632 JB	0.0492	5.26	1
11031	1234678-HpCDF	67562-39-4	7.39 B	0.0568	5.26	1
11031	1234789-HpCDF	55673-89-7	0.995 JBQ	0.0846	5.26	1
11031	OCDF	39001-02-0	17.5 B	0.0794	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	68	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9505 SDG#: DX021-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9505 SDG#: DX021-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 05:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9105 SDG#: DX021-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9105 SDG#: DX021-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0431 JBQ	0.0108	1.09	1
11031	12378-PeCDD	40321-76-4	0.0360 U	0.0360	5.44	1
11031	123478-HxCDD	39227-28-6	0.169 JB	0.0264	5.44	1
11031	123678-HxCDD	57653-85-7	0.766 JB	0.0269	5.44	1
11031	123789-HxCDD	19408-74-3	0.414 JB	0.0237	5.44	1
11031	1234678-HpCDD	35822-46-9	17.7 B	0.0470	5.44	1
11031	OCDD	3268-87-9	179 B	0.0391	10.9	1
11031	2378-TCDF	51207-31-9	0.198 JB	0.0229	1.09	1
11031	12378-PeCDF	57117-41-6	0.344 JBQ	0.0137	5.44	1
11031	23478-PeCDF	57117-31-4	0.333 JB	0.0115	5.44	1
11031	123478-HxCDF	70648-26-9	0.354 JB	0.0205	5.44	1
11031	123678-HxCDF	57117-44-9	0.317 JB	0.0311	5.44	1
11031	123789-HxCDF	72918-21-9	0.212 JB	0.0210	5.44	1
11031	234678-HxCDF	60851-34-5	0.438 JBQ	0.0185	5.44	1
11031	1234678-HpCDF	67562-39-4	3.16 JB	0.0349	5.44	1
11031	1234789-HpCDF	55673-89-7	0.430 JBQ	0.0474	5.44	1
11031	OCDF	39001-02-0	5.66 JB	0.0266	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	56	32 - 141
13C12-123678-HxCDD	55	28 - 130
13C12-123789-HxCDD	60	28 - 130
13C12-1234678-HpCDD	57	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	51	24 - 185
13C12-23478-PeCDF	56	21 - 178
13C12-123478-HxCDF	53	26 - 152
13C12-123678-HxCDF	37	26 - 123
13C12-234678-HxCDF	57	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	45	17 - 157
13C12-1278-TCDD (CRS)	56	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9105 SDG#: DX021-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9105 SDG#: DX021-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/16/2011 16:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



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Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0345 SDG#: DX021-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	7.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0345 SDG#: DX021-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0154 U	0.0154	1.08	1
11031	12378-PeCDD	40321-76-4	0.0932 JB	0.0265	5.39	1
11031	123478-HxCDD	39227-28-6	0.0843 JB	0.0298	5.39	1
11031	123678-HxCDD	57653-85-7	0.358 JB	0.0297	5.39	1
11031	123789-HxCDD	19408-74-3	0.270 JB	0.0281	5.39	1
11031	1234678-HpCDD	35822-46-9	9.85 B	0.0506	5.39	1
11031	OCDD	3268-87-9	135 B	0.0464	10.8	1
11031	2378-TCDF	51207-31-9	0.0234 JB	0.0189	1.08	1
11031	12378-PeCDF	57117-41-6	0.0899 JBQ	0.0120	5.39	1
11031	23478-PeCDF	57117-31-4	0.296 JB	0.0145	5.39	1
11031	123478-HxCDF	70648-26-9	0.231 JB	0.0204	5.39	1
11031	123678-HxCDF	57117-44-9	0.187 JB	0.0179	5.39	1
11031	123789-HxCDF	72918-21-9	0.161 JB	0.0219	5.39	1
11031	234678-HxCDF	60851-34-5	0.303 JB	0.0184	5.39	1
11031	1234678-HpCDF	67562-39-4	1.96 JB	0.0161	5.39	1
11031	1234789-HpCDF	55673-89-7	0.212 JB	0.0240	5.39	1
11031	OCDF	39001-02-0	3.36 JB	0.0278	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	64	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0345 SDG#: DX021-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0345 SDG#: DX021-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 07:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0145 SDG#: DX021-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0145 SDG#: DX021-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0188 U	0.0188	1.07	1
11031	12378-PeCDD	40321-76-4	0.0245 U	0.0245	5.36	1
11031	123478-HxCDD	39227-28-6	0.0327 JB	0.0182	5.36	1
11031	123678-HxCDD	57653-85-7	0.117 JBQ	0.0191	5.36	1
11031	123789-HxCDD	19408-74-3	0.139 JB	0.0191	5.36	1
11031	1234678-HpCDD	35822-46-9	0.461 JB	0.0250	5.36	1
11031	OCDD	3268-87-9	1.36 JB	0.0345	10.7	1
11031	2378-TCDF	51207-31-9	0.0167 U	0.0167	1.07	1
11031	12378-PeCDF	57117-41-6	0.0412 JBQ	0.0101	5.36	1
11031	23478-PeCDF	57117-31-4	0.136 JB	0.0103	5.36	1
11031	123478-HxCDF	70648-26-9	0.155 JBQ	0.0175	5.36	1
11031	123678-HxCDF	57117-44-9	0.150 JB	0.0158	5.36	1
11031	123789-HxCDF	72918-21-9	0.110 JB	0.0228	5.36	1
11031	234678-HxCDF	60851-34-5	0.225 JB	0.0170	5.36	1
11031	1234678-HpCDF	67562-39-4	0.790 JB	0.0133	5.36	1
11031	1234789-HpCDF	55673-89-7	0.0998 JB	0.0221	5.36	1
11031	OCDF	39001-02-0	0.515 JB	0.0259	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	63	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0145 SDG#: DX021-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0145 SDG#: DX021-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 08:25	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0191 SDG#: DX021-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	17.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0191 SDG#: DX021-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0177 U	0.0177	1.20	1
11031	12378-PeCDD	40321-76-4	0.0381 JBQ	0.0261	6.02	1
11031	123478-HxCDD	39227-28-6	0.0352 JBQ	0.0178	6.02	1
11031	123678-HxCDD	57653-85-7	0.0810 JBQ	0.0184	6.02	1
11031	123789-HxCDD	19408-74-3	0.0829 JBQ	0.0173	6.02	1
11031	1234678-HpCDD	35822-46-9	0.665 JB	0.0272	6.02	1
11031	OCDD	3268-87-9	4.85 JB	0.0306	12.0	1
11031	2378-TCDF	51207-31-9	0.0215 JB	0.0175	1.20	1
11031	12378-PeCDF	57117-41-6	0.0615 JB	0.0111	6.02	1
11031	23478-PeCDF	57117-31-4	0.144 JB	0.0117	6.02	1
11031	123478-HxCDF	70648-26-9	0.169 JB	0.0170	6.02	1
11031	123678-HxCDF	57117-44-9	0.133 JB	0.0139	6.02	1
11031	123789-HxCDF	72918-21-9	0.140 JB	0.0196	6.02	1
11031	234678-HxCDF	60851-34-5	0.282 JB	0.0159	6.02	1
11031	1234678-HpCDF	67562-39-4	0.892 JB	0.0112	6.02	1
11031	1234789-HpCDF	55673-89-7	0.148 JB	0.0200	6.02	1
11031	OCDF	39001-02-0	0.700 JB	0.0295	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0191 SDG#: DX021-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0191 SDG#: DX021-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 09:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3205 SDG#: DX021-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3205 SDG#: DX021-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.228 JB	0.0289	1.14	1
11031	12378-PeCDD	40321-76-4	1.40 JB	0.0530	5.72	1
11031	123478-HxCDD	39227-28-6	1.86 JB	0.0334	5.72	1
11031	123678-HxCDD	57653-85-7	4.48 JB	0.0348	5.72	1
11031	123789-HxCDD	19408-74-3	3.68 JB	0.0344	5.72	1
11031	1234678-HpCDD	35822-46-9	86.8 B	0.0896	5.72	1
11031	OCDD	3268-87-9	982 B	0.0714	11.4	1
11031	2378-TCDF	51207-31-9	0.556 JBQ	0.0564	1.14	1
11031	12378-PeCDF	57117-41-6	1.11 JB	0.0222	5.72	1
11031	23478-PeCDF	57117-31-4	1.23 JB	0.0214	5.72	1
11031	123478-HxCDF	70648-26-9	1.19 JB	0.0302	5.72	1
11031	123678-HxCDF	57117-44-9	1.12 JB	0.0270	5.72	1
11031	123789-HxCDF	72918-21-9	0.369 JB	0.0360	5.72	1
11031	234678-HxCDF	60851-34-5	1.46 JB	0.0289	5.72	1
11031	1234678-HpCDF	67562-39-4	14.6 B	0.0268	5.72	1
11031	1234789-HpCDF	55673-89-7	1.13 JB	0.0370	5.72	1
11031	OCDF	39001-02-0	43.1 B	0.0261	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3205 SDG#: DX021-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3205 SDG#: DX021-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 10:18	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3305 SDG#: DX021-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3305 SDG#: DX021-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.103 JBQ	0.0315	1.06	1
11031	12378-PeCDD	40321-76-4	0.874 JBQ	0.0525	5.31	1
11031	123478-HxCDD	39227-28-6	1.21 JB	0.0339	5.31	1
11031	123678-HxCDD	57653-85-7	2.48 JB	0.0356	5.31	1
11031	123789-HxCDD	19408-74-3	2.01 JB	0.0350	5.31	1
11031	1234678-HpCDD	35822-46-9	45.6 B	0.0756	5.31	1
11031	OCDD	3268-87-9	407 B	0.0720	10.6	1
11031	2378-TCDF	51207-31-9	0.227 JB	0.0502	1.06	1
11031	12378-PeCDF	57117-41-6	0.460 JB	0.0242	5.31	1
11031	23478-PeCDF	57117-31-4	0.628 JBQ	0.0228	5.31	1
11031	123478-HxCDF	70648-26-9	0.741 JB	0.0300	5.31	1
11031	123678-HxCDF	57117-44-9	0.799 JB	0.0274	5.31	1
11031	123789-HxCDF	72918-21-9	0.217 JB	0.0343	5.31	1
11031	234678-HxCDF	60851-34-5	1.07 JB	0.0290	5.31	1
11031	1234678-HpCDF	67562-39-4	9.94 B	0.0299	5.31	1
11031	1234789-HpCDF	55673-89-7	0.643 JB	0.0398	5.31	1
11031	OCDF	39001-02-0	20.7 B	0.0351	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	71	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3305 SDG#: DX021-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3305 SDG#: DX021-17*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 11:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:39 PM

Group Number: 1225277

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10349162402B 28a Moisture Content by 160.3	Sample number(s): 6163903-6163904, 6163906-6163908, 6163912-6163913 100 80-120								

Batch number: 10364162402B 28a Moisture Content by 160.3	Sample number(s): 6163895-6163899, 6163901-6163902, 6163905, 6163909-6163911 100 80-120								

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 10362001	Sample number(s): 6163900								
2378-TCDD	2.81	1.76	2.00	pg/l	89		67-158		
12378-PeCDD	0.684 J	0.492	10.0	pg/l	96		70-142		
123478-HxCDD	0.485 J	0.235	10.0	pg/l	106		70-164		
123678-HxCDD	0.512 J	0.243	10.0	pg/l	104		76-134		
123789-HxCDD	0.483 J	0.269	10.0	pg/l	106		64-162		
1234678-HpCDD	1.35 J	0.246	10.0	pg/l	108		70-140		
OCDD	2.39 J	0.274	20.0	pg/l	118		78-144		
2378-TCDF	0.181 J	0.166	2.00	pg/l	95		75-158		
12378-PeCDF	0.474 J	0.125	10.0	pg/l	104		80-134		
23478-PeCDF	0.810 J	0.113	10.0	pg/l	102		68-160		
123478-HxCDF	0.599 J	0.136	10.0	pg/l	111		72-134		
123678-HxCDF	0.568 J	0.132	10.0	pg/l	113		84-130		
123789-HxCDF	0.637 J	0.143	10.0	pg/l	111		78-130		
234678-HxCDF	0.505 J	0.136	10.0	pg/l	109		70-156		
1234678-HpCDF	1.41 J	0.122	10.0	pg/l	116		82-122		
1234789-HpCDF	0.582 J	0.148	10.0	pg/l	117		78-138		
OCDF	1.43 J	0.269	20.0	pg/l	122		63-170		
Batch number: 10364001	Sample number(s): 6163895-6163899, 6163901-6163913								
2378-TCDD	0.0150 J	0.00760	1.00	ng/kg	103		67-158		
12378-PeCDD	0.0278 J	0.00980	5.00	ng/kg	104		70-142		
123478-HxCDD	0.0185 J	0.00990	5.00	ng/kg	106		70-164		
123678-HxCDD	0.0227 J	0.0104	5.00	ng/kg	105		76-134		
123789-HxCDD	0.0268 J	0.0101	5.00	ng/kg	105		64-162		
1234678-HpCDD	0.136 J	0.0148	5.00	ng/kg	103		70-140		
OCDD	0.342 J	0.0157	10.0	ng/kg	103		78-144		
2378-TCDF	0.0289 J	0.00680	1.00	ng/kg	114		75-158		
12378-PeCDF	0.0340 J	0.00400	5.00	ng/kg	105		80-134		
23478-PeCDF	0.0647 J	0.00410	5.00	ng/kg	104		68-160		
123478-HxCDF	0.0503 J	0.00770	5.00	ng/kg	100		72-134		
123678-HxCDF	0.0334 J	0.00620	5.00	ng/kg	99		84-130		
123789-HxCDF	0.0604 J	0.00930	5.00	ng/kg	101		78-130		
234678-HpCDF	0.0453 J	0.00720	5.00	ng/kg	101		70-156		
1234678-HpCDF	0.123 J	0.00650	5.00	ng/kg	100		82-122		
1234789-HpCDF	0.0507 J	0.0115	5.00	ng/kg	101		78-138		
OCDF	0.248 J	0.0169	10.0	ng/kg	103		63-170		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:39 PM

Group Number: 1225277

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10349162402B 28a Moisture Content by 160.3	Sample number(s): 6163903-6163904, 6163906-6163908, 6163912-6163913 BKG: P163881 8.5 8.8 4 20								
Batch number: 10364162402B 28a Moisture Content by 160.3	Sample number(s): 6163895-6163899, 6163901-6163902, 6163905, 6163909-6163911 BKG: P163871 11.4 11.7 3 20								
Batch number: 10364001	Sample number(s): 6163895-6163899, 6163901-6163913 UNSPK: 6163897								
2378-TCDD	100	101	67-158	1	25				
12378-PeCDD	102	105	70-142	2	25				
123478-HxCDD	104	107	70-164	3	25				
123678-HxCDD	105	104	76-134	0	25				
123789-HxCDD	106	104	64-162	2	25				
1234678-HpCDD	101	108	70-140	7	25				
OCDD	99	128	78-144	23	25				
2378-TCDF	111	106	75-158	4	25				
12378-PeCDF	106	106	80-134	0	25				
23478-PeCDF	104	105	68-160	1	25				
123478-HxCDF	99	101	72-134	1	25				
123678-HxCDF	101	101	84-130	0	25				
123789-HxCDF	100	100	78-130	0	25				
234678-HxCDF	100	100	70-156	0	25				
1234678-HpCDF	101	101	82-122	0	25				
1234789-HpCDF	102	101	78-138	0	25				
OCDF	104	102	63-170	2	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 10362001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6163900	3*	34	27	27	29	29
Blank	6*	70	67	66	66	69
OPR	10*	63	56	55	57	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:39 PM

Group Number: 1225277

Surrogate Quality Control

6163900	29	29	28	9*	15*	24*
Blank	64	61	54	11*	32	58
OPR	55	54	48	17*	37	52
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6163900	23*	21*	30	29	33	29
Blank	54	49	63	55	57	68
OPR	50	46	56	48	51	60
Limits:	28-130	28-130	23-140	17-157	24-169	24-185
Analysis Name: 10a Dioxin/Furan by EPA 1613B						
Batch number: 10364001						
	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6163895	65	76	72	83	73	66
6163896	59	69	69	84	71	58
6163897	59	67	66	67	67	62
6163898	52	25	21*	25*	32	37
6163899	64	77	76	81	77	75
6163901	60	72	70	79	71	63
6163902	65	75	73	77	74	72
6163903	63	73	71	79	71	68
6163904	60	66	64	76	66	58
6163905	64	72	70	72	72	72
6163906	71	83	81	83	81	80
6163907	72	84	80	84	80	80
6163908	58	56	53	37	57	59
6163909	68	66	67	74	71	71
6163910	65	80	79	86	79	71
6163911	64	72	70	80	72	65
6163912	75	86	84	89	84	81
6163913	68	83	81	83	80	81
Blank	64	73	73	85	76	67
MS	52	25	21*	25*	32	37
MSD	64	77	76	81	77	75
OPR	61	72	68	80	70	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6163895	95	62	50	73	78	76
6163896	104	59	53	66	74	76
6163897	86	60	53	69	68	67
6163898	30	31	27	18*	29	24*
6163899	88	74	67	71	74	72
6163901	92	63	56	73	72	73
6163902	82	71	64	71	71	73
6163903	86	66	58	77	71	72
6163904	88	57	50	67	69	69
6163905	73	69	59	68	68	68
6163906	88	77	69	76	78	79

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:39 PM

Group Number: 1225277

Surrogate Quality Control

6163907	92	78	68	79	80	80
6163908	62	54	45	56	58	56
6163909	88	71	64	64	70	67
6163910	98	72	63	76	79	80
6163911	93	64	56	71	74	75
6163912	91	81	73	81	81	82
6163913	84	78	71	77	77	78
Blank	99	65	57	75	77	81
MS	30	31	27	18*	29	24*
MSD	88	74	67	71	74	72
OPR	93	62	53	71	75	76
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6163895	73	75	75	67	68	84
6163896	77	76	78	71	59	82
6163897	66	68	68	62	63	68
6163898	25*	37	34	34	30	34
6163899	73	74	75	70	69	81
6163901	71	71	73	66	64	80
6163902	71	71	72	66	70	78
6163903	70	71	70	66	67	80
6163904	70	70	70	65	61	77
6163905	67	68	66	59	70	75
6163906	76	77	77	70	77	84
6163907	79	79	80	74	78	86
6163908	55	60	57	52	59	51
6163909	69	75	74	70	72	84
6163910	80	79	82	72	70	86
6163911	73	74	76	68	65	81
6163912	82	81	81	75	80	87
6163913	78	76	77	69	77	83
Blank	79	78	77	69	64	80
MS	25*	37	34	34	30	34
MSD	73	74	75	70	69	81
OPR	75	75	74	65	59	78
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

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13013 1225277 6163895-913

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD															Other Instructions and Notes										
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOC/EPA 8260	1,4-Dioxane EPA 8210/8240	SVOC/EPA 8210C & 8210D EPA 8270/8270	TPH/GRO EPA 8015	TPH-EPA 8015B Method	Metals EPA 8210/8220/8230/8240	Metals EPA 7150*	Fluoride EPA 8030	PCB EPA 8062	Dioxin/Furan EPA 1631B	Perchlorate EPA 3140	Perchlorate Confirmation by EPA 8250	Pesticides EPA 8081A (surface soil only)	Herbicides EPA 8151 (surface soil only)	Nitrate EPA 8030		Nitrite EPA 8030	Formaldehyde EPA 8131A	Formaldehyde EPA 8131B	Enthalpy EPA 8130A	Cyanide EPA 8012B	Ammonia EPA 8015C	Ammonia EPA 8015D	Ammonia EPA 8015E	Ammonia EPA 8015F	
SL-006-SASC-SB-9.0-10.0	12.13.10	0955	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X							X	X	X	X	X	X	X	X	
DUP13-SASC-QC-121310	12.13.10	1010	soil	none	3 x 4 oz. Jars & 3 x 16 oz. Jars			X			X	X	X	X	X	X							X	X	X	X	X	X	X	X	
SL-006-SASC-SB-4.0-5.0MS	12.13.10	0945	soil	none	8 x 16 oz. Jars			X			X	X	X	X	X	X							X	X	X	X	X	X	X	X	
SL-006-SASC-SB-4.0-5.0MS	12.13.10	0945	soil	none	4 x 16 oz. Jars			X			X	X	X	X	X	X							X	X	X	X	X	X	X	X	
EB-15-SASB-121310	12.13.10	1215	water	none	6-1 liter amber			X						X	X			X	X												
EB-15-SASB-121310	12.13.10	1215	water	none	1-500 ml poly								X	X		X															
EB-15-SASB-121310	12.13.10	1215	water	HNO3	1-500 ml poly						X																				
EB-15-SASB-121310	12.13.10	1215	water	HCl	6-40 ml amber VOA vials	X	X																								
SL-006-SASC-SB-4.5MS	12.13.10	0943	soil	none	15 Encore Samplers	X	X	X																							
SL-006-SASC-SB-9.5	12.13.10	0953	soil	none	5 Encore Samplers	X	X	X																							
DUP13-SASC-QC-121310	12.13.10	1010	soil	none	5 Encore Samplers	X	X	X																							
SL-007-SASC-SB-9.5	12.13.10	1210	soil	none	5 Encore Samplers	X	X	X																							
SL-007-SASC-SB-4.0-5.0	12.13.10	1214	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	
SL-007-SASC-SB-9.0-10.0	12.13.10	1214	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	
SL-075-SASB-SS-0.0-0.5	12.13.10	0903	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-007-SASB-SS-4.5	12.13.10	1200	soil	none	5 Encore Samplers	X	X	X																							
SL-078-SASB-SS-0.0-0.5	12.13.10	1110	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-084-SASB-SS-0.0-0.5	12.13.10	1046	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-076-SASB-SS-0.0-0.5	12.13.10	0928	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-071-SASB-SS-0.0-0.5MS	12.13.10	1009	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X	X														
SL-139-SASB-SS-0.0-0.5	12.13.10	1104	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-085-SASB-SS-0.0-0.5	12.13.10	1049	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-074-SASB-SS-0.0-0.5	12.13.10	0915	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-301-SASB-SS-0.0-0.5	12.13.10	0900	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-079-SASB-SS-0.0-0.5	12.13.10	0930	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-072-SASB-SS-0.0-0.5	12.13.10	0948	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
DUP04-SASB-QC-121310	12.13.10	1015	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SED-029-SIV-SD-0.0-0.5	12.13.10	1152	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SED-031-SIV-SD-0.0-0.5	12.13.10	0920	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SED-030-SIV-SD-0.0-0.5	12.13.10	1113	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SED-040-SIV-SD-0.0-0.5	12.13.10	1019	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-086-SASB-SS-0.0-0.5	12.13.10	1345	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-092-SASB-SS-0.0-0.5	12.13.10	1327	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-103-SASB-SS-0.0-0.5	12.13.10	1425	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-089-SASB-SS-0.0-0.5	12.13.10	1410	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-236-SASB-SS-0.0-0.5	12.13.10	1310	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-085-SASB-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-085-SASB-SS-0.0-0.5	12.13.10	1335	soil	none	5 Encore Samplers	X	X	X																							
SL-085-SASB-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar																		X	X	X	X	X	X	X	X	
SL-087-SASB-SS-0.0-0.5	12.13.10	1317	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-095-SASB-SS-0.0-0.5	12.13.10	1440	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-091-SASB-SS-0.0-0.5	12.13.10	1510	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SL-003-SASC-SB-4.0-5.0	12.13.10	1437	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	
SL-003-SASC-SB-4.5	12.13.10	1433	soil	none	5 Encore Samplers	X	X	X																							
SL-001-SASC-SB-4.0-5.0	12.13.10	1608	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	
SL-001-SASC-SB-9.0-10.0	12.13.10	1616	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	
SL-001-SASC-SB-4.5	12.13.10	1604	soil	none	5 Encore Samplers	X	X	X																							
SL-001-SASC-SB-9.5	12.13.10	1612	soil	none	5 Encore Samplers	X	X	X																							
SED-032-SIV-SD-0.0-0.5	12.13.10	1457	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														
SED-033-SIV-SD-0.0-0.5	12.13.10	1540	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X														

SL-077-SASB-SS-00-0.5
Per AMC
on 12/17/10
NUM
12/30/10

Laboratory:
Lancaster Laboratories, Inc.
6 copiers

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

January 26, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/15/2010

Group Number: 1225470

SDG: DE038

PO Number: 1203-004-007-AL

Release Number: Tracking #11667

State of Sample Origin: CA

Client Sample DescriptionDUP05-SA5B-QC-121410 Grab Soil
SL-120-SA5B-SS-0.0-0.5 Grab Soil
SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SL-120-SA5B-SS-0.0-0.5DUP Grab Soil
SL-108-SA5B-SS-0.0-0.5 Grab Soil
SL-119-SA5B-SS-0.0-0.5 Grab Soil
SL-240-SA5B-SS-0.0-0.5 Grab Soil
SL-109-SA5B-SS-0.0-0.5 Grab Soil
SL-122-SA5B-SS-0.0-0.5 Grab Soil
SL-121-SA5B-SS-0.0-0.5 Grab Soil
SL-054-SA5B-SS-0.0-0.5 Grab Soil
SL-105-SA5B-SS-0.0-0.5 Grab Soil
SL-098-SA5B-SS-0.0-0.5 Grab Soil
SL-142-SA5B-SS-0.0-0.5 Grab Soil
SL-143-SA5B-SS-0.0-0.5 Grab Soil
SL-123-SA5B-SS-0.0-0.5 Grab Soil
SL-124-SA5B-SS-0.0-0.5 Grab Soil
SL-309-SA5B-SS-0.0-0.5 Grab Soil
SL-311-SA5B-SS-0.0-0.5 Grab Soil
SL-310-SA5B-SS-0.0-0.5 Grab Soil
SL-312-SA5B-SS-0.0-0.5 Grab Soil
SED-025-SIV-SD-0.0-0.5 Grab SoilLancaster Labs (LLI) #6164621
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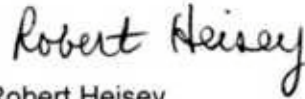
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgesser

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey
Senior Specialist

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

DUP05 SDG#: DE038-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170	1
04688	4-Chloroaniline	106-47-8	69	U 69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	690	U 690	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U 17	350	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	35	U 35	170	1
04688	4-Methylphenol	106-44-5	35	U 35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	35	U 35	170	1
04688	4-Nitroaniline	100-01-6	69	U 69	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

DUP05 SDG#: DE038-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17 U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17 U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69 U	0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.7	1
10138	Anthracene	120-12-7	0.69 J	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	10	0.69	1.7	1
10138	Benzo(a)pyrene	50-32-8	16	0.69	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	22	0.69	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	16	0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	7.7	0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.2 U	6.2	19	1
10138	Di-n-butylphthalate	84-74-2	7.3 J	6.2	19	1
10138	Chrysene	218-01-9	59	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	3.2	0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.2 U	6.2	19	1
10138	Dimethylphthalate	131-11-3	6.2 U	6.2	19	1
10138	Fluoranthene	206-44-0	11	0.69	1.7	1
10138	Fluorene	86-73-7	0.69 U	0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	5.1	0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69 U	0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69 U	0.69	1.7	1
10138	Naphthalene	91-20-3	0.99 J	0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69 U	0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.5 J	6.2	19	1
10138	Phenanthrene	85-01-8	3.7	0.69	1.7	1
10138	Pyrene	129-00-0	15	0.69	1.7	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.2 U	1.2	3.7	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.3	1
10401	2,4-DB	94-82-6	6.2	0.64	1.8	1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.2	1
10401	Dinoseb	88-85-7	0.83 U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83 U	0.83	1.8	1
10401	MCPA	94-74-6	820	79	260	1
10401	MCPP (Mecoprop)	93-65-2	140 U	140	260	1
10401	2,4,5-T	93-76-5	0.085 U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.078 U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

DUP05 SDG#: DE038-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.068 U	0.068	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.062 U	0.062	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035 U	0.035	0.17	1
01363	Chlordane	57-74-9	1.8 U	1.8	3.5	1
01363	p,p-DDD	72-54-8	0.88 U	0.88	0.88	1
01363	p,p-DDE	72-55-9	0.22 U	0.22	0.35	1
01363	p,p-DDT	50-29-3	0.85 U	0.85	0.85	1
01363	Delta BHC	319-86-8	0.037 U	0.037	0.17	1
01363	Dieldrin	60-57-1	0.11 U	0.11	0.35	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.068 U	0.068	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.068 U	0.068	0.35	1
01363	Endrin	72-20-8	0.068 U	0.068	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.19 U	0.19	0.35	1
01363	Endrin Ketone	53494-70-5	0.25 U	0.25	0.35	1
01363	Heptachlor	76-44-8	0.062 U	0.062	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.076 U	0.076	0.17	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.16 U	0.16	0.35	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.8	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52 U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54 U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52 U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8	1
10225	PCB-1254	11097-69-1	1.5 J	0.34	1.8	1
10225	PCB-1260	11096-82-5	1.1 J	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

The surrogate data is outside the QC limits due to unresolvable matrix

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

DUP05 SDG#: DE038-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	problems evident in the sample chromatogram.					
Metals			SW-846 6010B	mg/kg	mg/kg	mg/kg
01643	Aluminum	7429-90-5	6,070	5.06	20.1	1
07914	Boron	7440-42-8	5.07	0.894	5.03	1
01650	Calcium	7440-70-2	1,870	6.16	20.1	1
01654	Iron	7439-89-6	8,140	4.73	20.1	1
01656	Lithium	7439-93-2	4.4	0.22	2.0	1
01657	Magnesium	7439-95-4	1,170	2.55	10.1	1
06958	Manganese	7439-96-5	94.0	0.0784	0.503	1
10145	Phosphorus	7723-14-0	232	0.563	10.1	1
01662	Potassium	7440-09-7	955	18.1	50.3	1
01667	Sodium	7440-23-5	37.5 U	37.5	101	1
07968	Strontium	7440-24-6	24.4	0.0623	0.503	1
06969	Tin	7440-31-5	1.69 J	1.01	10.1	1
06970	Titanium	7440-32-6	248	0.382	1.01	1
10146	Zirconium	7440-67-7	1.19 J	0.844	5.03	1
			SW-846 6020	mg/kg	mg/kg	mg/kg
06124	Antimony	7440-36-0	0.169 J	0.0621	0.207	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.38	0.0621	0.414	2
06126	Barium	7440-39-3	56.9	0.112	0.414	2
06127	Beryllium	7440-41-7	0.270	0.0166	0.104	2
06128	Cadmium	7440-43-9	0.180	0.0373	0.104	2
06131	Chromium	7440-47-3	9.66	0.124	0.414	2
06132	Cobalt	7440-48-4	4.40	0.0207	0.104	2
06133	Copper	7440-50-8	6.39	0.0683	0.414	2
06135	Lead	7439-92-1	6.89	0.0108	0.207	2
06138	Molybdenum	7439-98-7	0.384	0.0518	0.104	2
06139	Nickel	7440-02-0	5.58	0.104	0.414	2
06141	Selenium	7782-49-2	0.157 J	0.0414	0.414	2
06142	Silver	7440-22-4	0.0124 U	0.0124	0.104	2
06145	Thallium	7440-28-0	0.0943 J	0.0311	0.104	2
06148	Vanadium	7440-62-2	20.2	0.0228	0.104	2
06149	Zinc	7440-66-6	36.5	0.580	3.11	2
			SW-846 7471A	mg/kg	mg/kg	mg/kg
00159	Mercury	7439-97-6	0.0029 U	0.0029	0.101	1
Wet Chemistry			EPA 300.0	mg/kg	mg/kg	mg/kg
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.0 J	0.83	1.0	1
			EPA 314.0	ug/kg	ug/kg	ug/kg
10147	7a Perchlorate EPA 314.0	14797-73-0	9.3 U	9.3	31.1	1
			SW-846 7199	mg/kg	mg/kg	mg/kg
05892	3a Cr VI by EPA 7199	18540-29-9	2.8	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

DUP05 SDG#: DE038-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	415	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.88	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	3.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 02:51	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 10:16	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 16:45	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 21:27	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 04:37	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

DUP05 SDG#: DE038-01FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:18	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:18	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:18	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:28	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 03:54	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 14:42	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 14:41	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	103500182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170	1
04688	4-Chloroaniline	106-47-8	70	U 70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U 17	350	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	35	U 35	170	1
04688	4-Methylphenol	106-44-5	35	U 35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	35	U 35	170	1
04688	4-Nitroaniline	100-01-6	70	U 70	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17 U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17 U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70 U	0.70	1.7	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.7	1
10138	Anthracene	120-12-7	0.41 J	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	4.3	0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	6.2	0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	7.4	0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	6.1	0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	3.8	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.5 J	6.3	19	1
10138	Chrysene	218-01-9	18	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	1.2 J	0.70	1.7	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	5.8	0.70	1.7	1
10138	Fluorene	86-73-7	0.70 U	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.9	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.70 U	0.70	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.70 U	0.70	1.7	1
10138	Naphthalene	91-20-3	0.70 U	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	9.0 J	6.3	19	1
10138	Phenanthrene	85-01-8	2.3	0.70	1.7	1
10138	Pyrene	129-00-0	7.0	0.70	1.7	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.4	1
10401	2,4-DB	94-82-6	3.9	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.83 U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83 U	0.83	1.8	1
10401	MCPA	94-74-6	720	79	260	1
10401	MCPP (Mecoprop)	93-65-2	200 J	78	260	1
10401	2,4,5-T	93-76-5	0.086 U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.078 U	0.078	0.18	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035 U	0.035	0.17	1
01363	Chlordane	57-74-9	0.83 U	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.19 U	0.19	0.35	1
01363	p,p-DDE	72-55-9	0.069 U	0.069	0.35	1
01363	p,p-DDT	50-29-3	0.093 U	0.093	0.35	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.069 U	0.069	0.35	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069 U	0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.35	1
01363	Endrin	72-20-8	0.069 U	0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.069 U	0.069	0.35	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.035 U	0.035	0.17	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.25 U	0.25	0.35	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.9 J	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52 U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54 U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52 U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8	1
10225	PCB-1254	11097-69-1	0.94 J	0.34	1.8	1
10225	PCB-1260	11096-82-5	0.91 J	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	7,750	5.19	20.6	1
07914	Boron	7440-42-8	5.91	0.919	5.16	1
01650	Calcium	7440-70-2	2,070	6.33	20.6	1
01654	Iron	7439-89-6	10,500	4.86	20.6	1
01656	Lithium	7439-93-2	7.6	0.23	2.1	1
01657	Magnesium	7439-95-4	1,850	2.62	10.3	1
06958	Manganese	7439-96-5	131	0.0805	0.516	1
10145	Phosphorus	7723-14-0	271	0.578	10.3	1
01662	Potassium	7440-09-7	1,440	18.6	51.6	1
01667	Sodium	7440-23-5	49.7 J	38.5	103	1
07968	Strontium	7440-24-6	25.0	0.0640	0.516	1
06969	Tin	7440-31-5	2.16 J	1.03	10.3	1
06970	Titanium	7440-32-6	404	0.392	1.03	1
10146	Zirconium	7440-67-7	2.17 J	0.867	5.16	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.155 J	0.0619	0.206	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.17	0.0619	0.413	2
06126	Barium	7440-39-3	48.1	0.112	0.413	2
06127	Beryllium	7440-41-7	0.294	0.0165	0.103	2
06128	Cadmium	7440-43-9	0.121	0.0372	0.103	2
06131	Chromium	7440-47-3	8.45	0.124	0.413	2
06132	Cobalt	7440-48-4	3.77	0.0206	0.103	2
06133	Copper	7440-50-8	5.68	0.0681	0.413	2
06135	Lead	7439-92-1	5.86	0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.310	0.0516	0.103	2
06139	Nickel	7440-02-0	5.49	0.103	0.413	2
06141	Selenium	7782-49-2	0.146 J	0.0413	0.413	2
06142	Silver	7440-22-4	0.0154 J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.101 J	0.0310	0.103	2
06148	Vanadium	7440-62-2	17.5	0.0227	0.103	2
06149	Zinc	7440-66-6	26.3	0.578	3.10	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0103 J	0.0030	0.103	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.83 U	0.83	1.0	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.3	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	414	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.38	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 01:07	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 08:41	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 17:13	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 21:40	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 20:44	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 04:56	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:00	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:00	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:00	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:29	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 03:12	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 13:30	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 14:57	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,700	17	170	1
04688	Acenaphthylene	208-96-8	1,800	17	170	1
04688	Aniline	62-53-3	1,000	170	520	1
04688	Anthracene	120-12-7	1,700	17	170	1
04688	Benziidine	92-87-5	2,400	J 1,200	3,500	1
04688	Benzo(a)anthracene	56-55-3	1,800	17	170	1
04688	Benzo(a)pyrene	50-32-8	1,600	17	170	1
04688	Benzo(b)fluoranthene	205-99-2	1,600	17	170	1
04688	Benzo(g,h,i)perylene	191-24-2	1,600	17	170	1
04688	Benzo(k)fluoranthene	207-08-9	1,600	17	170	1
04688	Benzoic acid	65-85-0	800	170	520	1
04688	Benzyl alcohol	100-51-6	1,700	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	1,700	17	170	1
04688	Butylbenzylphthalate	85-68-7	1,900	17	170	1
04688	Di-n-butylphthalate	84-74-2	1,800	17	170	1
04688	Carbazole	86-74-8	1,700	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	1,700	35	170	1
04688	4-Chloroaniline	106-47-8	1,400	70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,700	17	170	1
04688	2-Chloronaphthalene	91-58-7	1,400	17	170	1
04688	2-Chlorophenol	95-57-8	1,800	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,700	35	170	1
04688	Chrysene	218-01-9	1,800	17	170	1
04688	Dibenz(a,h)anthracene	53-70-3	1,600	17	170	1
04688	Dibenzofuran	132-64-9	1,700	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	1,600	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	1,600	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	1,600	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,200	100	350	1
04688	2,4-Dichlorophenol	120-83-2	1,800	17	170	1
04688	Diethylphthalate	84-66-2	1,700	17	170	1
04688	2,4-Dimethylphenol	105-67-9	1,800	35	170	1
04688	3,5-Dimethylphenol	108-68-9	1,900	35	170	1
04688	Dimethylphthalate	131-11-3	1,800	17	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	990	170	520	1
04688	2,4-Dinitrophenol	51-28-5	1,000	J 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	1,800	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	1,800	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	1,900	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,900	17	350	1
04688	Fluoranthene	206-44-0	1,700	17	170	1
04688	Fluorene	86-73-7	1,700	17	170	1
04688	Hexachlorobenzene	118-74-1	1,800	17	170	1
04688	Hexachlorobutadiene	87-68-3	1,700	70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	2,800	170	520	1
04688	Hexachloroethane	67-72-1	1,600	17	170	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600	17	170	1
04688	Isophorone	78-59-1	1,700	17	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,700	17	170	1
04688	2-Methylnaphthalene	91-57-6	1,600	17	170	1
04688	2-Methylphenol	95-48-7	1,800	35	170	1
04688	4-Methylphenol	106-44-5	1,800	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,600	17	170	1
04688	2-Nitroaniline	88-74-4	1,800	17	170	1
04688	3-Nitroaniline	99-09-2	1,700	35	170	1
04688	4-Nitroaniline	100-01-6	1,300	70	170	1
04688	Nitrobenzene	98-95-3	1,800	17	170	1
04688	2-Nitrophenol	88-75-5	1,700	17	170	1
04688	4-Nitrophenol	100-02-7	1,700	170	520	1
04688	N-Nitrosodimethylamine	62-75-9	1,600	35	170	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,600	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,700	17	170	1
04688	Pentachlorophenol	87-86-5	1,300	170	520	1
04688	Phenanthrene	85-01-8	1,700	17	170	1
04688	Phenol	108-95-2	1,900	17	170	1
04688	Pyrene	129-00-0	1,900	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,700	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	1,800	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	1,800	35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	26	0.70	1.7	1
10138	Acenaphthylene	208-96-8	27	0.35	1.7	1
10138	Anthracene	120-12-7	27	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	28	0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	26	0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	26	0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	20	0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	25	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	34	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	36	6.3	19	1
10138	Chrysene	218-01-9	28	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	20	0.70	1.7	1
10138	Diethylphthalate	84-66-2	30	6.3	19	1
10138	Dimethylphthalate	131-11-3	30	6.3	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	35	6.3	19	1
10138	Fluoranthene	206-44-0	28	0.70	1.7	1
10138	Fluorene	86-73-7	27	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	19	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	29	0.70	1.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	2-Methylnaphthalene	91-57-6	25	0.70	1.7	1
10138	Naphthalene	91-20-3	26	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	25	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	33	6.3	19	1
10138	Phenanthrene	85-01-8	26	0.70	1.7	1
10138	Pyrene	129-00-0	27	0.70	1.7	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.6 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	11		1.3	3.8	1
10401	Dalapon	75-99-0	16		4.6	9.4	1
10401	2,4-DB	94-82-6	9.0		0.65	1.8	1
10401	Dicamba	1918-00-9	0.90	J	0.42	1.3	1
10401	Dinoseb	88-85-7	1.3	J	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	8.9		0.83	1.8	1
10401	MCPA	94-74-6	950		79	260	1
10401	MCPP (Mecoprop)	93-65-2	750		78	260	1
10401	2,4,5-T	93-76-5	0.78		0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.66		0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs		SW-846 8081A	ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.30		0.069	0.18	1
01363	Alpha BHC	319-84-6	0.35		0.035	0.18	1
01363	Beta BHC	319-85-7	0.34		0.063	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.38		0.035	0.18	1
01363	Chlordane	57-74-9	0.83	U	0.83	3.5	1
01363	p,p-DDD	72-54-8	1.0		0.069	0.35	1
01363	p,p-DDE	72-55-9	0.82		0.069	0.35	1
01363	p,p-DDT	50-29-3	0.80		0.069	0.35	1
01363	Delta BHC	319-86-8	0.40		0.038	0.18	1
01363	Dieldrin	60-57-1	0.83		0.069	0.35	1
01363	Endosulfan I	959-98-8	0.33		0.046	0.18	1
01363	Endosulfan II	33213-65-9	0.60		0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.73		0.069	0.35	1
01363	Endrin	72-20-8	0.76		0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.46		0.069	0.35	1
01363	Endrin Ketone	53494-70-5	0.59		0.069	0.35	1
01363	Heptachlor	76-44-8	0.46		0.063	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.30		0.035	0.18	1
01363	Methoxychlor	72-43-5	4.8		0.35	1.7	1
01363	Mirex	2385-85-5	0.069	U	0.069	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.9 J	1.0	3.4	1
10225	PCB-1016	12674-11-2	37	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52 U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54 U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52 U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8	1
10225	PCB-1254	11097-69-1	6.9	0.34	1.8	1
10225	PCB-1260	11096-82-5	33	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,700	5.09	20.2	1
07914	Boron	7440-42-8	198	0.901	5.06	1
01650	Calcium	7440-70-2	2,070	6.21	20.2	1
01654	Iron	7439-89-6	9,450	4.77	20.2	1
01656	Lithium	7439-93-2	107	0.22	2.0	1
01657	Magnesium	7439-95-4	1,870	2.57	10.1	1
06958	Manganese	7439-96-5	162	0.0790	0.506	1
10145	Phosphorus	7723-14-0	369	0.567	10.1	1
01662	Potassium	7440-09-7	2,400	18.2	50.6	1
01667	Sodium	7440-23-5	1,090	37.8	101	1
07968	Strontium	7440-24-6	125	0.0628	0.506	1
06969	Tin	7440-31-5	389	1.01	10.1	1
06970	Titanium	7440-32-6	498	0.385	1.01	1
10146	Zirconium	7440-67-7	102	0.850	5.06	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.01	0.0626	0.209	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.65	0.0626	0.417	2
06126	Barium	7440-39-3	63.9	0.113	0.417	2
06127	Beryllium	7440-41-7	1.11	0.0167	0.104	2
06128	Cadmium	7440-43-9	1.24	0.0375	0.104	2
06131	Chromium	7440-47-3	20.8	0.125	0.417	2
06132	Cobalt	7440-48-4	50.3	0.0209	0.104	2
06133	Copper	7440-50-8	17.2	0.0688	0.417	2
06135	Lead	7439-92-1	9.28	0.0108	0.209	2
06138	Molybdenum	7439-98-7	11.2	0.0521	0.104	2
06139	Nickel	7440-02-0	16.4	0.104	0.417	2
06141	Selenium	7782-49-2	2.07	0.0417	0.417	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06142	Silver	7440-22-4	11.1	0.0125	0.104	2
06145	Thallium	7440-28-0	0.513	0.0313	0.104	2
06148	Vanadium	7440-62-2	31.5	0.0229	0.104	2
06149	Zinc	7440-66-6	37.9	0.584	3.13	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.169	0.0028	0.0993	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.5	0.83	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	457	9.4	31.3	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	41.8	1.0	5.2	5
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 01:42	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 09:13	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 17:40	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 21:55	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 21:03	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 05:15	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:09	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:09	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:09	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:32	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 03:40	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 14:18	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 15:13	Carrie E Miller	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,700	17	170	1
04688	Acenaphthylene	208-96-8	1,800	17	170	1
04688	Aniline	62-53-3	900	170	520	1
04688	Anthracene	120-12-7	1,700	17	170	1
04688	Benziidine	92-87-5	3,000	J 1,200	3,500	1
04688	Benzo(a)anthracene	56-55-3	1,700	17	170	1
04688	Benzo(a)pyrene	50-32-8	1,500	17	170	1
04688	Benzo(b)fluoranthene	205-99-2	1,500	17	170	1
04688	Benzo(g,h,i)perylene	191-24-2	1,500	17	170	1
04688	Benzo(k)fluoranthene	207-08-9	1,500	17	170	1
04688	Benzoic acid	65-85-0	650	170	520	1
04688	Benzyl alcohol	100-51-6	1,700	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	1,600	17	170	1
04688	Butylbenzylphthalate	85-68-7	1,800	17	170	1
04688	Di-n-butylphthalate	84-74-2	1,700	17	170	1
04688	Carbazole	86-74-8	1,700	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	1,700	35	170	1
04688	4-Chloroaniline	106-47-8	1,200	70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,600	17	170	1
04688	2-Chloronaphthalene	91-58-7	1,500	17	170	1
04688	2-Chlorophenol	95-57-8	1,800	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,700	35	170	1
04688	Chrysene	218-01-9	1,700	17	170	1
04688	Dibenz(a,h)anthracene	53-70-3	1,500	17	170	1
04688	Dibenzofuran	132-64-9	1,700	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	1,600	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	1,600	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	1,600	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,000	100	350	1
04688	2,4-Dichlorophenol	120-83-2	1,800	17	170	1
04688	Diethylphthalate	84-66-2	1,700	17	170	1
04688	2,4-Dimethylphenol	105-67-9	1,700	35	170	1
04688	3,5-Dimethylphenol	108-68-9	1,900	35	170	1
04688	Dimethylphthalate	131-11-3	1,700	17	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	850	170	520	1
04688	2,4-Dinitrophenol	51-28-5	820	J 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	1,700	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	1,800	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	1,800	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,800	17	350	1
04688	Fluoranthene	206-44-0	1,700	17	170	1
04688	Fluorene	86-73-7	1,700	17	170	1
04688	Hexachlorobenzene	118-74-1	1,700	17	170	1
04688	Hexachlorobutadiene	87-68-3	1,600	70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	2,600	170	520	1
04688	Hexachloroethane	67-72-1	1,600	17	170	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,500	17	170	1
04688	Isophorone	78-59-1	1,700	17	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,700	17	170	1
04688	2-Methylnaphthalene	91-57-6	1,600	17	170	1
04688	2-Methylphenol	95-48-7	1,800	35	170	1
04688	4-Methylphenol	106-44-5	1,700	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,600	17	170	1
04688	2-Nitroaniline	88-74-4	1,900	17	170	1
04688	3-Nitroaniline	99-09-2	1,700	35	170	1
04688	4-Nitroaniline	100-01-6	1,300	70	170	1
04688	Nitrobenzene	98-95-3	1,700	17	170	1
04688	2-Nitrophenol	88-75-5	1,600	17	170	1
04688	4-Nitrophenol	100-02-7	1,700	170	520	1
04688	N-Nitrosodimethylamine	62-75-9	1,500	35	170	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,600	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	1,700	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,600	17	170	1
04688	Pentachlorophenol	87-86-5	1,200	170	520	1
04688	Phenanthrene	85-01-8	1,700	17	170	1
04688	Phenol	108-95-2	1,800	17	170	1
04688	Pyrene	129-00-0	1,900	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,700	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	1,800	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	1,800	35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	27	0.70	1.7	1
10138	Acenaphthylene	208-96-8	28	0.35	1.7	1
10138	Anthracene	120-12-7	28	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	30	0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	28	0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	28	0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	25	0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	26	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	35	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	37	6.3	19	1
10138	Chrysene	218-01-9	37	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	24	0.70	1.7	1
10138	Diethylphthalate	84-66-2	31	6.3	19	1
10138	Dimethylphthalate	131-11-3	32	6.3	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	38	6.3	19	1
10138	Fluoranthene	206-44-0	30	0.70	1.7	1
10138	Fluorene	86-73-7	28	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	24	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	29	0.70	1.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	2-Methylnaphthalene	91-57-6	25	0.70	1.7	1
10138	Naphthalene	91-20-3	26	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	26	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	36	6.3	19	1
10138	Phenanthrene	85-01-8	27	0.70	1.7	1
10138	Pyrene	129-00-0	30	0.70	1.7	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.6 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	8.0	1.3	3.8
10401	Dalapon	75-99-0	4.6 U	4.6	9.4
10401	2,4-DB	94-82-6	11	0.65	1.8
10401	Dicamba	1918-00-9	0.76 J	0.42	1.3
10401	Dinoseb	88-85-7	0.87 J	0.83	2.5
10401	2,4-DP (Dichlorprop)	120-36-5	9.9	0.83	1.8
10401	MCPA	94-74-6	1,800	79	260
10401	MCPP (Mecoprop)	93-65-2	820	78	260
10401	2,4,5-T	93-76-5	0.56	0.086	0.18
10401	2,4,5-TP	93-72-1	0.87	0.078	0.18

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.33	0.069	0.18
01363	Alpha BHC	319-84-6	0.44	0.035	0.18
01363	Beta BHC	319-85-7	0.41	0.063	0.18
01363	Gamma BHC - Lindane	58-89-9	0.42	0.035	0.18
01363	Chlordane	57-74-9	0.83 U	0.83	3.5
01363	p,p-DDD	72-54-8	1.3	0.069	0.35
01363	p,p-DDE	72-55-9	0.72	0.069	0.35
01363	p,p-DDT	50-29-3	1.2	0.069	0.35
01363	Delta BHC	319-86-8	0.28	0.038	0.18
01363	Dieldrin	60-57-1	1.0	0.069	0.35
01363	Endosulfan I	959-98-8	0.41	0.046	0.18
01363	Endosulfan II	33213-65-9	0.74	0.069	0.35
01363	Endosulfan Sulfate	1031-07-8	0.74	0.069	0.35
01363	Endrin	72-20-8	0.95	0.069	0.35
01363	Endrin Aldehyde	7421-93-4	0.53	0.069	0.35
01363	Endrin Ketone	53494-70-5	0.65	0.069	0.35
01363	Heptachlor	76-44-8	0.50	0.063	0.18
01363	Heptachlor Epoxide	1024-57-3	0.36	0.035	0.18
01363	Methoxychlor	72-43-5	6.0	0.35	1.7
01363	Mirex	2385-85-5	0.069 U	0.069	0.35
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4	1
10225	PCB-1016	12674-11-2	25	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52 U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54 U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52 U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8	1
10225	PCB-1254	11097-69-1	9.9	0.34	1.8	1
10225	PCB-1260	11096-82-5	27	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,700	5.14	20.4	1
07914	Boron	7440-42-8	206	0.910	5.11	1
01650	Calcium	7440-70-2	2,930	6.27	20.4	1
01654	Iron	7439-89-6	10,100	4.82	20.4	1
01656	Lithium	7439-93-2	110	0.22	2.0	1
01657	Magnesium	7439-95-4	2,040	2.60	10.2	1
06958	Manganese	7439-96-5	181	0.0797	0.511	1
10145	Phosphorus	7723-14-0	362	0.572	10.2	1
01662	Potassium	7440-09-7	2,590	18.4	51.1	1
01667	Sodium	7440-23-5	1,120	38.1	102	1
07968	Strontium	7440-24-6	126	0.0634	0.511	1
06969	Tin	7440-31-5	394	1.02	10.2	1
06970	Titanium	7440-32-6	540	0.388	1.02	1
10146	Zirconium	7440-67-7	105	0.859	5.11	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.989	0.0619	0.206	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.47	0.0619	0.413	2
06126	Barium	7440-39-3	57.9	0.112	0.413	2
06127	Beryllium	7440-41-7	1.11	0.0165	0.103	2
06128	Cadmium	7440-43-9	1.22	0.0372	0.103	2
06131	Chromium	7440-47-3	19.8	0.124	0.413	2
06132	Cobalt	7440-48-4	51.3	0.0206	0.103	2
06133	Copper	7440-50-8	16.0	0.0681	0.413	2
06135	Lead	7439-92-1	9.36	0.0107	0.206	2
06138	Molybdenum	7439-98-7	11.0	0.0516	0.103	2
06139	Nickel	7440-02-0	16.0	0.103	0.413	2
06141	Selenium	7782-49-2	2.02	0.0413	0.413	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06142	Silver	7440-22-4	10.4	0.0124	0.103	2
06145	Thallium	7440-28-0	0.557	0.0310	0.103	2
06148	Vanadium	7440-62-2	29.3	0.0227	0.103	2
06149	Zinc	7440-66-6	35.7	0.578	3.10	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.173	0.0029	0.103	1
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 02:16	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 09:44	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 18:08	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 22:09	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 21:21	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 05:33	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:12	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:12	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:12	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:33	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Sample Description: SL-120-SA5B-SS-0.0-0.5DUP Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164625
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	6,850	5.19	20.6	1
07914	Boron	7440-42-8	5.13 J	0.919	5.16	1
01650	Calcium	7440-70-2	1,770	6.33	20.6	1
01654	Iron	7439-89-6	9,150	4.86	20.6	1
01656	Lithium	7439-93-2	5.9	0.23	2.1	1
01657	Magnesium	7439-95-4	1,420	2.62	10.3	1
06958	Manganese	7439-96-5	117	0.0805	0.516	1
10145	Phosphorus	7723-14-0	238	0.578	10.3	1
01662	Potassium	7440-09-7	1,160	18.6	51.6	1
01667	Sodium	7440-23-5	40.7 J	38.5	103	1
07968	Strontium	7440-24-6	24.7	0.0640	0.516	1
06969	Tin	7440-31-5	1.93 J	1.03	10.3	1
06970	Titanium	7440-32-6	314	0.392	1.03	1
10146	Zirconium	7440-67-7	2.48 J	0.867	5.16	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.146 J	0.0619	0.206	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.39	0.0619	0.413	2
06126	Barium	7440-39-3	51.4	0.112	0.413	2
06127	Beryllium	7440-41-7	0.257	0.0165	0.103	2
06128	Cadmium	7440-43-9	0.119	0.0372	0.103	2
06131	Chromium	7440-47-3	8.57	0.124	0.413	2
06132	Cobalt	7440-48-4	3.84	0.0206	0.103	2
06133	Copper	7440-50-8	5.43	0.0681	0.413	2
06135	Lead	7439-92-1	6.01	0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.335	0.0516	0.103	2
06139	Nickel	7440-02-0	5.13	0.103	0.413	2
06141	Selenium	7782-49-2	0.116 J	0.0413	0.413	2
06142	Silver	7440-22-4	0.0173 J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.0933 J	0.0310	0.103	2
06148	Vanadium	7440-62-2	17.1	0.0227	0.103	2
06149	Zinc	7440-66-6	25.5	0.578	3.10	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0092 J	0.0029	0.100	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.83	1.0	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.3	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.56 J	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5DUP Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164625
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	419	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.39	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1
11626	28a Moisture Content by 160.3	n.a.	4.0	0.50	0.50	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:06	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5DUP Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164625
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12005 SDG#: DE038-02DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:06	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:31	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 03:26	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 13:54	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 16:09	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11805 SDG#: DE038-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170	1
04688	4-Chloroaniline	106-47-8	70	U 70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	37	J 17	350	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	35	U 35	170	1
04688	4-Methylphenol	106-44-5	35	U 35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	35	U 35	170	1
04688	4-Nitroaniline	100-01-6	70	U 70	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11805 SDG#: DE038-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17 U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17 U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70 U	0.70	1.7	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.7	1
10138	Anthracene	120-12-7	1.1 J	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	7.5	0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	6.5	0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	8.9	0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	3.8	0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	4.2	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	7.1 J	6.3	19	1
10138	Chrysene	218-01-9	8.8	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.90 J	0.70	1.7	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	9.4	0.70	1.7	1
10138	Fluorene	86-73-7	0.70 U	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.8	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.70 U	0.70	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.70 U	0.70	1.7	1
10138	Naphthalene	91-20-3	0.70 U	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	3.0	0.70	1.7	1
10138	Pyrene	129-00-0	14	0.70	1.7	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.4	1
10401	2,4-DB	94-82-6	4.5	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84 U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84 U	0.84	1.8	1
10401	MCPA	94-74-6	530 U	530	530	1
10401	MCPP (Mecoprop)	93-65-2	460 U	460	460	1
10401	2,4,5-T	93-76-5	0.086 U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.078 U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11805 SDG#: DE038-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.17	1
01363	Chlordane	57-74-9	0.84 U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.069 U	0.069	0.36	1
01363	p,p-DDE	72-55-9	0.069 U	0.069	0.36	1
01363	p,p-DDT	50-29-3	0.38 U	0.38	0.38	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.094 U	0.094	0.36	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069 U	0.069	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.36	1
01363	Endrin	72-20-8	0.069 U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.096 U	0.096	0.36	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.036 U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.7	1
01363	Mirex	2385-85-5	0.19 U	0.19	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.5	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.5	1
10225	Aroclor 5460	11126-42-4	3.3 J	1.0	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.52 U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54 U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52 U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8	1
10225	PCB-1260	11096-82-5	2.6	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

*=This limit was used in the evaluation of the final result

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11805 SDG#: DE038-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,100	5.16	20.5	1
07914	Boron	7440-42-8	8.66	0.913	5.13	1
01650	Calcium	7440-70-2	5,160	6.29	20.5	1
01654	Iron	7439-89-6	25,800	4.83	20.5	1
01656	Lithium	7439-93-2	19.2	0.23	2.1	1
01657	Magnesium	7439-95-4	5,140	2.60	10.3	1
06958	Manganese	7439-96-5	358	0.0800	0.513	1
10145	Phosphorus	7723-14-0	533	0.574	10.3	1
01662	Potassium	7440-09-7	3,890	18.5	51.3	1
01667	Sodium	7440-23-5	174	38.3	103	1
07968	Strontium	7440-24-6	29.3	0.0636	0.513	1
06969	Tin	7440-31-5	2.61 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,500	0.390	1.03	1
10146	Zirconium	7440-67-7	0.861 U	0.861	5.13	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.149 J	0.0621	0.207	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.46	0.0621	0.414	2
06126	Barium	7440-39-3	133	0.112	0.414	2
06127	Beryllium	7440-41-7	0.467	0.0166	0.104	2
06128	Cadmium	7440-43-9	0.183	0.0373	0.104	2
06131	Chromium	7440-47-3	25.4	0.124	0.414	2
06132	Cobalt	7440-48-4	6.76	0.0207	0.104	2
06133	Copper	7440-50-8	16.3	0.0684	0.414	2
06135	Lead	7439-92-1	8.16	0.0108	0.207	2
06138	Molybdenum	7439-98-7	1.13	0.0518	0.104	2
06139	Nickel	7440-02-0	16.2	0.104	0.414	2
06141	Selenium	7782-49-2	0.0656 J	0.0414	0.414	2
06142	Silver	7440-22-4	0.0221 J	0.0124	0.104	2
06145	Thallium	7440-28-0	0.271	0.0311	0.104	2
06148	Vanadium	7440-62-2	44.0	0.0228	0.104	2
06149	Zinc	7440-66-6	79.7	0.580	3.11	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0376 J	0.0029	0.102	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.84	1.0	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.4	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.52 J	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11805 SDG#: DE038-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	393	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.94	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	4.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 03:26	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 11:40	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 18:35	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 22:23	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 21:40	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 05:52	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:17	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:56	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11805 SDG#: DE038-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:17	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:05	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:05	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:56	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:22	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/31/2010 06:54	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:22	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:22	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:35	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 04:08	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 15:30	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 16:33	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11905 SDG#: DE038-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	72	U 72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	20	J 18	360	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	72	U 72	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	540	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11905 SDG#: DE038-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36 U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36 U	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72 U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36 U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.91 J	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.87 J	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	1.6 J	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.2 J	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.73 J	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5 U	6.5	19	1
10138	Di-n-butylphthalate	84-74-2	7.7 J	6.5	19	1
10138	Chrysene	218-01-9	1.8	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	19	1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	19	1
10138	Fluoranthene	206-44-0	1.5 J	0.72	1.8	1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72 U	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	7.2 J	6.5	19	1
10138	Phenanthrene	85-01-8	1.1 J	0.72	1.8	1
10138	Pyrene	129-00-0	2.0	0.72	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8 U	4.8	9.7	1
10401	2,4-DB	94-82-6	4.3 U	4.3	4.3	1
10401	Dicamba	1918-00-9	0.43 U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.87 U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87 U	0.87	1.8	1
10401	MCPA	94-74-6	310 U	310	310	1
10401	MCPP (Mecoprop)	93-65-2	810 U	810	2,700	1
10401	2,4,5-T	93-76-5	0.089 U	0.089	0.18	1
10401	2,4,5-TP	93-72-1	0.081 U	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11905 SDG#: DE038-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.071 U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.065 U	0.065	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037 U	0.037	0.18	1
01363	Chlordane	57-74-9	0.87 U	0.87	3.7	1
01363	p,p-DDD	72-54-8	0.68 U	0.68	0.68	1
01363	p,p-DDE	72-55-9	0.15 U	0.15	0.37	1
01363	p,p-DDT	50-29-3	0.22 U	0.22	0.37	1
01363	Delta BHC	319-86-8	0.051 J	0.039	0.18	1
01363	Dieldrin	60-57-1	0.071 U	0.071	0.37	1
01363	Endosulfan I	959-98-8	0.048 U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.075 U	0.075	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.071 U	0.071	0.37	1
01363	Endrin	72-20-8	0.071 U	0.071	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.089 U	0.089	0.37	1
01363	Endrin Ketone	53494-70-5	0.071 U	0.071	0.37	1
01363	Heptachlor	76-44-8	0.065 U	0.065	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037 U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8	1
01363	Mirex	2385-85-5	0.071 U	0.071	0.37	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.1	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.2 U	2.2	7.1	2
10225	Aroclor 5442	12642-23-8	2.2 U	2.2	7.1	2
10225	Aroclor 5460	11126-42-4	3.8 J	2.2	7.1	2
10225	PCB-1016	12674-11-2	0.71 U	0.71	3.7	2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.7	2
10225	PCB-1232	11141-16-5	1.1 U	1.1	3.7	2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.7	2
10225	PCB-1248	12672-29-6	0.71 U	0.71	3.7	2
10225	PCB-1254	11097-69-1	31	0.71	3.7	2
10225	PCB-1260	11096-82-5	0.71 U	0.71	3.7	2
10225	PCB-1262	37324-23-5	0.71 U	0.71	3.7	2
10225	PCB-1268	11100-14-4	0.71 U	0.71	3.7	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11905 SDG#: DE038-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	21,600	5.29	21.0	1
07914	Boron	7440-42-8	9.24	0.935	5.25	1
01650	Calcium	7440-70-2	3,230	6.44	21.0	1
01654	Iron	7439-89-6	28,000	4.95	21.0	1
01656	Lithium	7439-93-2	24.5	0.23	2.1	1
01657	Magnesium	7439-95-4	5,420	2.67	10.5	1
06958	Manganese	7439-96-5	427	0.0820	0.525	1
10145	Phosphorus	7723-14-0	434	0.588	10.5	1
01662	Potassium	7440-09-7	4,930	18.9	52.5	1
01667	Sodium	7440-23-5	98.1 J	39.2	105	1
07968	Strontium	7440-24-6	24.1	0.0651	0.525	1
06969	Tin	7440-31-5	3.09 J	1.05	10.5	1
06970	Titanium	7440-32-6	1,640	0.399	1.05	1
10146	Zirconium	7440-67-7	1.08 J	0.883	5.25	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.222	0.0643	0.214	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	6.66	0.0643	0.429	2
06126	Barium	7440-39-3	170	0.116	0.429	2
06127	Beryllium	7440-41-7	0.845	0.0171	0.107	2
06128	Cadmium	7440-43-9	0.235	0.0386	0.107	2
06131	Chromium	7440-47-3	28.8	0.129	0.429	2
06132	Cobalt	7440-48-4	7.67	0.0214	0.107	2
06133	Copper	7440-50-8	15.1	0.0707	0.429	2
06135	Lead	7439-92-1	8.79	0.0111	0.214	2
06138	Molybdenum	7439-98-7	0.769	0.0536	0.107	2
06139	Nickel	7440-02-0	18.0	0.107	0.429	2
06141	Selenium	7782-49-2	0.161 J	0.0429	0.429	2
06142	Silver	7440-22-4	0.0445 J	0.0129	0.107	2
06145	Thallium	7440-28-0	0.340	0.0321	0.107	2
06148	Vanadium	7440-62-2	46.8	0.0236	0.107	2
06149	Zinc	7440-66-6	77.5	0.600	3.21	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.105	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.4	0.87	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.5	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.57 J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11905 SDG#: DE038-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	416	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.03	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	7.6	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 04:00	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 12:11	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 19:03	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 22:38	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 21:58	Lindsey K Lafferty	2
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 06:10	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:20	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/30/2010 10:13	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:00	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

11905 SDG#: DE038-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:20	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:13	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:13	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:00	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:36	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 04:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 15:54	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 16:57	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

24005 SDG#: DE038-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170	1
04688	4-Chloroaniline	106-47-8	69	U 69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	690	U 690	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U 17	350	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	35	U 35	170	1
04688	4-Methylphenol	106-44-5	35	U 35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	35	U 35	170	1
04688	4-Nitroaniline	100-01-6	69	U 69	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

24005 SDG#: DE038-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17 U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17 U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69 U	0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.7	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.69 U	0.69	1.7	1
10138	Benzo(a)pyrene	50-32-8	0.69 U	0.69	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	1.0 J	0.69	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.69 U	0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.69 U	0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3 U	6.3	19	1
10138	Chrysene	218-01-9	0.81 J	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.69 U	0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	0.96 J	0.69	1.7	1
10138	Fluorene	86-73-7	0.69 U	0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.69 U	0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69 U	0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69 U	0.69	1.7	1
10138	Naphthalene	91-20-3	0.69 U	0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69 U	0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	0.69 U	0.69	1.7	1
10138	Pyrene	129-00-0	1.2 J	0.69	1.7	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.4	1
10401	2,4-DB	94-82-6	2.7	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.83 U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83 U	0.83	1.8	1
10401	MCPA	94-74-6	200 U	200	260	1
10401	MCPP (Mecoprop)	93-65-2	150 J	78	260	1
10401	2,4,5-T	93-76-5	0.085 U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.078 U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

24005 SDG#: DE038-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035 U	0.035	0.17	1
01363	Chlordane	57-74-9	0.83 U	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.069 U	0.069	0.35	1
01363	p,p-DDE	72-55-9	0.069 U	0.069	0.35	1
01363	p,p-DDT	50-29-3	0.22 U	0.22	0.35	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.15 U	0.15	0.35	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069 U	0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.35	1
01363	Endrin	72-20-8	0.069 U	0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.11 U	0.11	0.35	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.066 U	0.066	0.17	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.069 U	0.069	0.35	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	4.8	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52 U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54 U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52 U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8	1
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.8	1
10225	PCB-1260	11096-82-5	2.2	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,400	5.04	20.0	1
07914	Boron	7440-42-8	8.65	0.891	5.01	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

24005 SDG#: DE038-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	6,410	6.14	20.0	1
01654	Iron	7439-89-6	22,800	4.72	20.0	1
01656	Lithium	7439-93-2	22.2	0.22	2.0	1
01657	Magnesium	7439-95-4	5,000	2.54	10.0	1
06958	Manganese	7439-96-5	315	0.0781	0.501	1
10145	Phosphorus	7723-14-0	458	0.561	10.0	1
01662	Potassium	7440-09-7	3,480	18.0	50.1	1
01667	Sodium	7440-23-5	135	37.4	100	1
07968	Strontium	7440-24-6	35.3	0.0621	0.501	1
06969	Tin	7440-31-5	2.62 J	1.00	10.0	1
06970	Titanium	7440-32-6	1,450	0.381	1.00	1
10146	Zirconium	7440-67-7	2.11 J	0.841	5.01	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.113 J	0.0619	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.41	0.0619	0.413	2
06126	Barium	7440-39-3	129	0.111	0.413	2
06127	Beryllium	7440-41-7	0.557	0.0165	0.103	2
06128	Cadmium	7440-43-9	0.147	0.0371	0.103	2
06131	Chromium	7440-47-3	20.6	0.124	0.413	2
06132	Cobalt	7440-48-4	6.25	0.0206	0.103	2
06133	Copper	7440-50-8	12.2	0.0681	0.413	2
06135	Lead	7439-92-1	6.15	0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.583	0.0516	0.103	2
06139	Nickel	7440-02-0	12.8	0.103	0.413	2
06141	Selenium	7782-49-2	0.0812 J	0.0413	0.413	2
06142	Silver	7440-22-4	0.0304 J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.274	0.0309	0.103	2
06148	Vanadium	7440-62-2	42.0	0.0227	0.103	2
06149	Zinc	7440-66-6	71.8	0.578	3.09	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0229 J	0.0029	0.102	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	0.83	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.3	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.0	1
	ASTM D1498		mV	mV	mV	

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

24005 SDG#: DE038-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	402	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.20	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	4.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 04:35	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 11:50	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 20:25	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 22:52	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 22:17	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 06:29	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:27	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:07	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

24005 SDG#: DE038-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:27	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:17	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:17	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:07	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:34	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:34	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:34	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:39	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 05:05	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 16:18	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 17:05	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10905 SDG#: DE038-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	J 18	350	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10905 SDG#: DE038-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	1.4 J	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	15	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	11	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	15	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	4.5	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	6.4	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.7 J	6.4	19	1
10138	Chrysene	218-01-9	17	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.4 J	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Fluoranthene	206-44-0	24	0.71	1.8	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	4.8	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71 U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19	1
10138	Phenanthrene	85-01-8	7.6	0.71	1.8	1
10138	Pyrene	129-00-0	30	0.71	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.6	1
10401	2,4-DB	94-82-6	4.2	0.66	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.85 U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85 U	0.85	1.8	1
10401	MCPA	94-74-6	100 U	100	270	1
10401	MCPP (Mecoprop)	93-65-2	340	80	270	1
10401	2,4,5-T	93-76-5	0.087 U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080 U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10905 SDG#: DE038-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.070 U	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.39 U	0.39	0.39	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.11 U	0.11	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.12 U	0.12	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.036 U	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	2.4 J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8	1
10225	PCB-1260	11096-82-5	2.5	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,600	5.13	20.4	1
07914	Boron	7440-42-8	9.42	0.908	5.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10905 SDG#: DE038-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	4,040	6.26	20.4	1
01654	Iron	7439-89-6	26,500	4.81	20.4	1
01656	Lithium	7439-93-2	23.5	0.22	2.0	1
01657	Magnesium	7439-95-4	4,670	2.59	10.2	1
06958	Manganese	7439-96-5	307	0.0796	0.510	1
10145	Phosphorus	7723-14-0	427	0.572	10.2	1
01662	Potassium	7440-09-7	3,240	18.4	51.0	1
01667	Sodium	7440-23-5	133	38.1	102	1
07968	Strontium	7440-24-6	25.5	0.0633	0.510	1
06969	Tin	7440-31-5	2.66 J	1.02	10.2	1
06970	Titanium	7440-32-6	1,400	0.388	1.02	1
10146	Zirconium	7440-67-7	1.54 J	0.857	5.10	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.127 J	0.0618	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.97	0.0618	0.412	2
06126	Barium	7440-39-3	120	0.111	0.412	2
06127	Beryllium	7440-41-7	0.720	0.0165	0.103	2
06128	Cadmium	7440-43-9	0.152	0.0371	0.103	2
06131	Chromium	7440-47-3	21.5	0.124	0.412	2
06132	Cobalt	7440-48-4	5.79	0.0206	0.103	2
06133	Copper	7440-50-8	16.1	0.0680	0.412	2
06135	Lead	7439-92-1	6.93	0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.646	0.0515	0.103	2
06139	Nickel	7440-02-0	12.6	0.103	0.412	2
06141	Selenium	7782-49-2	0.0757 J	0.0412	0.412	2
06142	Silver	7440-22-4	0.0289 J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.288	0.0309	0.103	2
06148	Vanadium	7440-62-2	43.7	0.0227	0.103	2
06149	Zinc	7440-66-6	64.5	0.577	3.09	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0156 J	0.0029	0.0995	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.3	0.85	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	31.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.1	1
	ASTM D1498		mV	mV	mV	

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10905 SDG#: DE038-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	410	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.11	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 05:09	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 12:22	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 20:52	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 23:06	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 22:36	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 06:47	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:30	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:11	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10905 SDG#: DE038-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:30	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:21	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:21	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:11	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:37	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:40	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 05:19	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 16:42	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 17:21	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12205 SDG#: DE038-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	350	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12205 SDG#: DE038-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71 U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71 U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.90 J	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71 U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71 U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3 U	6.3	19	1
10138	Chrysene	218-01-9	0.97 J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71 U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	0.92 J	0.71	1.8	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71 U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71 U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	0.77 J	0.71	1.8	1
10138	Pyrene	129-00-0	1.0 J	0.71	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.5	1
10401	2,4-DB	94-82-6	8.0	0.66	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.85 U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85 U	0.85	1.8	1
10401	MCPA	94-74-6	990	80	260	1
10401	MCPP (Mecoprop)	93-65-2	240 J	79	260	1
10401	2,4,5-T	93-76-5	0.087 U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.33 U	0.33	0.33	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12205 SDG#: DE038-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.13 U	0.13	0.36	1
01363	p,p-DDT	50-29-3	0.16 U	0.16	0.36	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.036 U	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	2.0	0.35	1.8	1
10225	PCB-1260	11096-82-5	1.0 J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,800	5.27	21.0	1
07914	Boron	7440-42-8	7.70	0.932	5.24	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12205 SDG#: DE038-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	2,290	6.42	21.0	1
01654	Iron	7439-89-6	16,300	4.93	21.0	1
01656	Lithium	7439-93-2	15.4	0.23	2.1	1
01657	Magnesium	7439-95-4	3,150	2.66	10.5	1
06958	Manganese	7439-96-5	233	0.0817	0.524	1
10145	Phosphorus	7723-14-0	369	0.587	10.5	1
01662	Potassium	7440-09-7	3,020	18.9	52.4	1
01667	Sodium	7440-23-5	70.0 J	39.1	105	1
07968	Strontium	7440-24-6	21.1	0.0650	0.524	1
06969	Tin	7440-31-5	2.31 J	1.05	10.5	1
06970	Titanium	7440-32-6	902	0.398	1.05	1
10146	Zirconium	7440-67-7	1.81 J	0.880	5.24	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.103 J	0.0611	0.204	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.98	0.0611	0.407	2
06126	Barium	7440-39-3	102	0.110	0.407	2
06127	Beryllium	7440-41-7	0.531	0.0163	0.102	2
06128	Cadmium	7440-43-9	0.182	0.0366	0.102	2
06131	Chromium	7440-47-3	19.2	0.122	0.407	2
06132	Cobalt	7440-48-4	5.19	0.0204	0.102	2
06133	Copper	7440-50-8	10.9	0.0672	0.407	2
06135	Lead	7439-92-1	7.63	0.0106	0.204	2
06138	Molybdenum	7439-98-7	0.566	0.0509	0.102	2
06139	Nickel	7440-02-0	11.6	0.102	0.407	2
06141	Selenium	7782-49-2	0.120 J	0.0407	0.407	2
06142	Silver	7440-22-4	0.0169 J	0.0122	0.102	2
06145	Thallium	7440-28-0	0.229	0.0305	0.102	2
06148	Vanadium	7440-62-2	33.8	0.0224	0.102	2
06149	Zinc	7440-66-6	51.2	0.570	3.05	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0044 J	0.0028	0.0988	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8	0.85	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.7	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.43 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12205 SDG#: DE038-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	444	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.58	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	5.5	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 09:03	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 12:54	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 21:20	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 23:20	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 22:54	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 07:06	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:34	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:15	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

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Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12205 SDG#: DE038-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:34	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:25	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:25	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:15	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:40	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:40	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:42	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 05:34	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 17:06	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 17:45	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12105 SDG#: DE038-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	350	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12105 SDG#: DE038-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71 U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71 U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71 U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71 U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71 U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4 U	6.4	19	1
10138	Chrysene	218-01-9	0.35 U	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71 U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Fluoranthene	206-44-0	0.71 U	0.71	1.8	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71 U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71 U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19	1
10138	Phenanthrene	85-01-8	0.71 U	0.71	1.8	1
10138	Pyrene	129-00-0	0.71 U	0.71	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.5	1
10401	2,4-DB	94-82-6	4.4	0.66	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.85 U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85 U	0.85	1.8	1
10401	MCPA	94-74-6	420 U	420	420	1
10401	MCPP (Mecoprop)	93-65-2	240 U	240	270	1
10401	2,4,5-T	93-76-5	0.087 U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080 U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12105 SDG#: DE038-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.093 J	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.36	0.070	0.36	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.13 J	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
The LCS recoveries for various compounds are outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.35 U	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,500	5.23	20.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12105 SDG#: DE038-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
07914	Boron	7440-42-8	8.99	0.925	5.20	1
01650	Calcium	7440-70-2	3,820	6.37	20.8	1
01654	Iron	7439-89-6	22,300	4.90	20.8	1
01656	Lithium	7439-93-2	21.2	0.23	2.1	1
01657	Magnesium	7439-95-4	4,540	2.64	10.4	1
06958	Manganese	7439-96-5	341	0.0811	0.520	1
10145	Phosphorus	7723-14-0	458	0.582	10.4	1
01662	Potassium	7440-09-7	3,780	18.7	52.0	1
01667	Sodium	7440-23-5	86.8 J	38.8	104	1
07968	Strontium	7440-24-6	20.4	0.0645	0.520	1
06969	Tin	7440-31-5	2.53 J	1.04	10.4	1
06970	Titanium	7440-32-6	1,280	0.395	1.04	1
10146	Zirconium	7440-67-7	1.93 J	0.873	5.20	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.154 J	0.0624	0.208	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.88	0.0624	0.416	2
06126	Barium	7440-39-3	124	0.112	0.416	2
06127	Beryllium	7440-41-7	0.623	0.0166	0.104	2
06128	Cadmium	7440-43-9	0.227	0.0374	0.104	2
06131	Chromium	7440-47-3	22.3	0.125	0.416	2
06132	Cobalt	7440-48-4	6.14	0.0208	0.104	2
06133	Copper	7440-50-8	12.6	0.0686	0.416	2
06135	Lead	7439-92-1	11.1	0.0108	0.208	2
06138	Molybdenum	7439-98-7	0.664	0.0520	0.104	2
06139	Nickel	7440-02-0	14.2	0.104	0.416	2
06141	Selenium	7782-49-2	0.158 J	0.0416	0.416	2
06142	Silver	7440-22-4	0.0291 J	0.0125	0.104	2
06145	Thallium	7440-28-0	0.262	0.0312	0.104	2
06148	Vanadium	7440-62-2	39.1	0.0229	0.104	2
06149	Zinc	7440-66-6	62.1	0.582	3.12	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0048 J	0.0028	0.0990	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9	0.85	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.8	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.43 J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12105 SDG#: DE038-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	447	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.49	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 09:37	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 13:25	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 21:48	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 23:35	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 07:24	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:37	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:19	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:37	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12105 SDG#: DE038-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:29	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:29	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:19	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:43	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/31/2010 06:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:43	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:43	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:43	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 05:48	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 17:30	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 18:01	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

05405 SDG#: DE038-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Anthracene	120-12-7	30	J 18	180	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,600	1
04688	Benzo(a)anthracene	56-55-3	110	J 18	180	1
04688	Benzo(a)pyrene	50-32-8	69	J 18	180	1
04688	Benzo(b)fluoranthene	205-99-2	74	J 18	180	1
04688	Benzo(g,h,i)perylene	191-24-2	31	J 18	180	1
04688	Benzo(k)fluoranthene	207-08-9	32	J 18	180	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Chrysene	218-01-9	130	J 18	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	360	1
04688	Fluoranthene	206-44-0	200	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	32	J 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

05405 SDG#: DE038-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Nitrobenzene	98-95-3	18 U	18	180	1
04688	2-Nitrophenol	88-75-5	18 U	18	180	1
04688	4-Nitrophenol	100-02-7	180 U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18 U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18 U	18	180	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180 U	180	530	1
04688	Phenanthrene	85-01-8	75 J	18	180	1
04688	Phenol	108-95-2	18 U	18	180	1
04688	Pyrene	129-00-0	230 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36 U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36 U	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4 U	6.4	19	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71 U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71 U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5 J	6.4	19	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.6	1
10401	2,4-DB	94-82-6	1.6 J	0.66	1.8	1
10401	Dicamba	1918-00-9	0.43 U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85 U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85 U	0.85	1.8	1
10401	MCPA	94-74-6	81 U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	80 U	80	270	1
10401	2,4,5-T	93-76-5	0.087 U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080 U	0.080	0.18	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

05405 SDG#: DE038-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8081A						
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	1.3 U	1.3	3.6	1
01363	p,p-DDD	72-54-8	0.61 U	0.61	0.61	1
01363	p,p-DDE	72-55-9	0.37 U	0.37	0.37	1
01363	p,p-DDT	50-29-3	0.44 U	0.44	0.44	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.26 U	0.26	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.22 U	0.22	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.045 U	0.045	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.49 U	0.49	0.49	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	6.4	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8	1
10225	PCB-1260	11096-82-5	1.5 J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	15,500	5.21	20.7	1
07914	Boron	7440-42-8	9.07	0.921	5.18	1
01650	Calcium	7440-70-2	7,360	6.34	20.7	1
01654	Iron	7439-89-6	22,500	4.88	20.7	1
01656	Lithium	7439-93-2	19.7	0.23	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

05405 SDG#: DE038-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	4,710	2.63	10.4	1
06958	Manganese	7439-96-5	303	0.0807	0.518	1
10145	Phosphorus	7723-14-0	495	0.580	10.4	1
01662	Potassium	7440-09-7	3,230	18.6	51.8	1
01667	Sodium	7440-23-5	138	38.6	104	1
07968	Strontium	7440-24-6	35.1	0.0642	0.518	1
06969	Tin	7440-31-5	2.78 J	1.04	10.4	1
06970	Titanium	7440-32-6	1,310	0.393	1.04	1
10146	Zirconium	7440-67-7	1.62 J	0.869	5.18	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.225	0.0633	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.00	0.0633	0.422	2
06126	Barium	7440-39-3	131	0.114	0.422	2
06127	Beryllium	7440-41-7	0.579	0.0169	0.106	2
06128	Cadmium	7440-43-9	0.227	0.0380	0.106	2
06131	Chromium	7440-47-3	24.1	0.127	0.422	2
06132	Cobalt	7440-48-4	5.80	0.0211	0.106	2
06133	Copper	7440-50-8	12.9	0.0697	0.422	2
06135	Lead	7439-92-1	7.07	0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.674	0.0528	0.106	2
06139	Nickel	7440-02-0	13.8	0.106	0.422	2
06141	Selenium	7782-49-2	0.104 J	0.0422	0.422	2
06142	Silver	7440-22-4	0.0379 J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.324	0.0317	0.106	2
06148	Vanadium	7440-62-2	42.7	0.0232	0.106	2
06149	Zinc	7440-66-6	81.9	0.591	3.17	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0220 J	0.0029	0.102	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4	0.85	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.0	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.49 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	440	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

05405 SDG#: DE038-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.80	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 10:12	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 13:57	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 22:15	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 23:49	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 23:31	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 07:43	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:41	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:23	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:41	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:33	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:33	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

05405 SDG#: DE038-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:23	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:46	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:46	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:46	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:44	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 06:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 17:54	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 18:09	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10505 SDG#: DE038-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170	1
04688	4-Chloroaniline	106-47-8	70	U 70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U 17	350	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	35	U 35	170	1
04688	4-Methylphenol	106-44-5	35	U 35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	35	U 35	170	1
04688	4-Nitroaniline	100-01-6	70	U 70	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10505 SDG#: DE038-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17 U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17 U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70 U	0.70	1.7	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.7	1
10138	Anthracene	120-12-7	0.89 J	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.70 U	0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	0.70 U	0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	1.5 J	0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.70 U	0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.70 U	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	7.4 J	6.3	19	1
10138	Chrysene	218-01-9	1.1 J	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70 U	0.70	1.7	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	0.70 U	0.70	1.7	1
10138	Fluorene	86-73-7	0.70 U	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70 U	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.70 U	0.70	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.70 U	0.70	1.7	1
10138	Naphthalene	91-20-3	0.70 U	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	0.70 U	0.70	1.7	1
10138	Pyrene	129-00-0	0.89 J	0.70	1.7	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.4	1
10401	2,4-DB	94-82-6	4.3	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84 U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84 U	0.84	1.8	1
10401	MCPA	94-74-6	290	79	260	1
10401	MCPP (Mecoprop)	93-65-2	96 U	96	260	1
10401	2,4,5-T	93-76-5	0.086 U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.078 U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10505 SDG#: DE038-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035 U	0.035	0.17	1
01363	Chlordane	57-74-9	0.84 U	0.84	3.5	1
01363	p,p-DDD	72-54-8	0.18 U	0.18	0.35	1
01363	p,p-DDE	72-55-9	0.20 U	0.20	0.35	1
01363	p,p-DDT	50-29-3	0.24 U	0.24	0.35	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.11 U	0.11	0.35	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069 U	0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.35	1
01363	Endrin	72-20-8	0.069 U	0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.069 U	0.069	0.35	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.094 U	0.094	0.17	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.069 U	0.069	0.35	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.1 U	2.1	6.9	2
10225	Aroclor 5442	12642-23-8	2.1 U	2.1	6.9	2
10225	Aroclor 5460	11126-42-4	4.6 J	2.1	6.9	2
10225	PCB-1016	12674-11-2	0.69 U	0.69	3.5	2
10225	PCB-1221	11104-28-2	1.0 U	1.0	3.5	2
10225	PCB-1232	11141-16-5	1.1 U	1.1	3.5	2
10225	PCB-1242	53469-21-9	1.0 U	1.0	3.5	2
10225	PCB-1248	12672-29-6	0.69 U	0.69	3.5	2
10225	PCB-1254	11097-69-1	30	0.69	3.5	2
10225	PCB-1260	11096-82-5	0.69 U	0.69	3.5	2
10225	PCB-1262	37324-23-5	0.69 U	0.69	3.5	2
10225	PCB-1268	11100-14-4	0.69 U	0.69	3.5	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10505 SDG#: DE038-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,500	5.20	20.7	1
07914	Boron	7440-42-8	8.56	0.920	5.17	1
01650	Calcium	7440-70-2	6,520	6.34	20.7	1
01654	Iron	7439-89-6	27,000	4.87	20.7	1
01656	Lithium	7439-93-2	18.1	0.23	2.1	1
01657	Magnesium	7439-95-4	5,240	2.63	10.3	1
06958	Manganese	7439-96-5	343	0.0806	0.517	1
10145	Phosphorus	7723-14-0	762	0.579	10.3	1
01662	Potassium	7440-09-7	3,870	18.6	51.7	1
01667	Sodium	7440-23-5	179	38.5	103	1
07968	Strontium	7440-24-6	30.0	0.0641	0.517	1
06969	Tin	7440-31-5	2.60 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,340	0.393	1.03	1
10146	Zirconium	7440-67-7	0.868 U	0.868	5.17	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.144 J	0.0614	0.205	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.15	0.0614	0.409	2
06126	Barium	7440-39-3	140	0.111	0.409	2
06127	Beryllium	7440-41-7	0.427	0.0164	0.102	2
06128	Cadmium	7440-43-9	0.211	0.0368	0.102	2
06131	Chromium	7440-47-3	23.5	0.123	0.409	2
06132	Cobalt	7440-48-4	6.24	0.0205	0.102	2
06133	Copper	7440-50-8	16.5	0.0675	0.409	2
06135	Lead	7439-92-1	9.06	0.0106	0.205	2
06138	Molybdenum	7439-98-7	1.43	0.0512	0.102	2
06139	Nickel	7440-02-0	15.6	0.102	0.409	2
06141	Selenium	7782-49-2	0.0577 J	0.0409	0.409	2
06142	Silver	7440-22-4	0.0340 J	0.0123	0.102	2
06145	Thallium	7440-28-0	0.294	0.0307	0.102	2
06148	Vanadium	7440-62-2	43.3	0.0225	0.102	2
06149	Zinc	7440-66-6	96.1	0.573	3.07	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0207 J	0.0028	0.0979	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8	0.84	1.0	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.3	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10505 SDG#: DE038-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	421	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.81	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	4.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 10:46	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 14:29	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 22:43	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 00:04	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 23:50	Lindsey K Lafferty	2
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 09:02	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:44	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/30/2010 10:37	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:27	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

10505 SDG#: DE038-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:44	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:37	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:37	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:27	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:49	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:49	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:49	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:46	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 06:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 18:18	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 18:25	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

09805 SDG#: DE038-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,400	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	34	U 34	170	1
04688	4-Chloroaniline	106-47-8	69	U 69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U 34	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	340	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	34	U 34	170	1
04688	3,5-Dimethylphenol	108-68-9	34	U 34	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	690	U 690	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	34	U 34	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U 17	340	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	34	U 34	170	1
04688	4-Methylphenol	106-44-5	34	U 34	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	34	U 34	170	1
04688	4-Nitroaniline	100-01-6	69	U 69	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

09805 SDG#: DE038-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17 U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17 U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	34 U	34	170	1
04688	2,4,6-Trichlorophenol	88-06-2	34 U	34	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69 U	0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.34 U	0.34	1.7	1
10138	Anthracene	120-12-7	0.34 U	0.34	1.7	1
10138	Benzo(a)anthracene	56-55-3	1.6 J	0.69	1.7	1
10138	Benzo(a)pyrene	50-32-8	1.7 J	0.69	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	2.7	0.69	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	1.1 J	0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	1.2 J	0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.2 U	6.2	19	1
10138	Di-n-butylphthalate	84-74-2	7.0 J	6.2	19	1
10138	Chrysene	218-01-9	2.2	0.34	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.69 U	0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.2 U	6.2	19	1
10138	Dimethylphthalate	131-11-3	6.2 U	6.2	19	1
10138	Fluoranthene	206-44-0	2.7	0.69	1.7	1
10138	Fluorene	86-73-7	0.69 U	0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.78 J	0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69 U	0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69 U	0.69	1.7	1
10138	Naphthalene	91-20-3	0.69 U	0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69 U	0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.2 U	6.2	19	1
10138	Phenanthrene	85-01-8	0.99 J	0.69	1.7	1
10138	Pyrene	129-00-0	2.9	0.69	1.7	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.2 U	1.2	3.7	1
10401	Dalapon	75-99-0	4.5 U	4.5	9.3	1
10401	2,4-DB	94-82-6	2.5	0.64	1.8	1
10401	Dicamba	1918-00-9	0.41 U	0.41	1.2	1
10401	Dinoseb	88-85-7	0.83 U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83 U	0.83	1.8	1
10401	MCPA	94-74-6	79 U	79	260	1
10401	MCPP (Mecoprop)	93-65-2	150 J	77	260	1
10401	2,4,5-T	93-76-5	0.085 U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.077 U	0.077	0.18	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Perchlorate	SW-846 6850 1/2007	ug/kg	ug/kg	ug/kg		
06557	6a Perchlorate EPA 6850	14797-73-0	2.2 U	2.2	5.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

09805 SDG#: DE038-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.068 U	0.068	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.062 U	0.062	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035 U	0.035	0.17	1
01363	Chlordane	57-74-9	0.83 U	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.068 U	0.068	0.35	1
01363	p,p-DDE	72-55-9	0.068 U	0.068	0.35	1
01363	p,p-DDT	50-29-3	0.068 U	0.068	0.35	1
01363	Delta BHC	319-86-8	0.037 U	0.037	0.17	1
01363	Dieldrin	60-57-1	0.068 U	0.068	0.35	1
01363	Endosulfan I	959-98-8	0.045 U	0.045	0.17	1
01363	Endosulfan II	33213-65-9	0.068 U	0.068	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.068 U	0.068	0.35	1
01363	Endrin	72-20-8	0.068 U	0.068	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.068 U	0.068	0.35	1
01363	Endrin Ketone	53494-70-5	0.068 U	0.068	0.35	1
01363	Heptachlor	76-44-8	0.062 U	0.062	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.035 U	0.035	0.17	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.068 U	0.068	0.35	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.8	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	10 U	10	34	10
10225	Aroclor 5442	12642-23-8	10 U	10	34	10
10225	Aroclor 5460	11126-42-4	10 U	10	34	10
10225	PCB-1016	12674-11-2	3.4 U	3.4	18	10
10225	PCB-1221	11104-28-2	5.2 U	5.2	18	10
10225	PCB-1232	11141-16-5	5.4 U	5.4	18	10
10225	PCB-1242	53469-21-9	5.2 U	5.2	18	10
10225	PCB-1248	12672-29-6	3.4 U	3.4	18	10
10225	PCB-1254	11097-69-1	4.9 J	3.4	18	10
10225	PCB-1260	11096-82-5	3.4 U	3.4	18	10
10225	PCB-1262	37324-23-5	3.4 U	3.4	18	10
10225	PCB-1268	11100-14-4	3.4 U	3.4	18	10

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,300	5.14	20.5	1
07914	Boron	7440-42-8	8.72	0.910	5.11	1
01650	Calcium	7440-70-2	7,920	6.27	20.5	1
01654	Iron	7439-89-6	22,800	4.82	20.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

09805 SDG#: DE038-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	18.4	0.23	2.0	1
01657	Magnesium	7439-95-4	5,590	2.60	10.2	1
06958	Manganese	7439-96-5	312	0.0798	0.511	1
10145	Phosphorus	7723-14-0	634	0.573	10.2	1
01662	Potassium	7440-09-7	4,600	18.4	51.1	1
01667	Sodium	7440-23-5	180	38.2	102	1
07968	Strontium	7440-24-6	26.7	0.0634	0.511	1
06969	Tin	7440-31-5	2.25 J	1.02	10.2	1
06970	Titanium	7440-32-6	1,590	0.389	1.02	1
10146	Zirconium	7440-67-7	1.40 J	0.859	5.11	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.126 J	0.0608	0.203	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	3.81	0.0608	0.405	2
06126	Barium	7440-39-3	127	0.109	0.405	2
06127	Beryllium	7440-41-7	0.365	0.0162	0.101	2
06128	Cadmium	7440-43-9	0.176	0.0365	0.101	2
06131	Chromium	7440-47-3	18.8	0.122	0.405	2
06132	Cobalt	7440-48-4	7.01	0.0203	0.101	2
06133	Copper	7440-50-8	13.1	0.0668	0.405	2
06135	Lead	7439-92-1	7.00	0.0105	0.203	2
06138	Molybdenum	7439-98-7	0.472	0.0506	0.101	2
06139	Nickel	7440-02-0	10.6	0.101	0.405	2
06141	Selenium	7782-49-2	0.0689 J	0.0405	0.405	2
06142	Silver	7440-22-4	0.0257 J	0.0122	0.101	2
06145	Thallium	7440-28-0	0.244	0.0304	0.101	2
06148	Vanadium	7440-62-2	45.6	0.0223	0.101	2
06149	Zinc	7440-66-6	71.9	0.567	3.04	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0248 J	0.0029	0.101	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4	0.83	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.3 U	9.3	31.0	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.0	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	405	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

09805 SDG#: DE038-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.71	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	3.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 11:21	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 15:01	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 23:10	John W Perkins	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103500020A	12/21/2010 17:57	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 00:18	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 09:39	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103500020A	12/17/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:57	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

09805 SDG#: DE038-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:41	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:57	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:52	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:52	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:41	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:52	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:52	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:52	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:47	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 06:30	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 18:42	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 18:41	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14205 SDG#: DE038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	360	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14205 SDG#: DE038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36 U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36 U	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36 U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71 U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71 U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71 U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71 U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71 U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4 U	6.4	19	1
10138	Chrysene	218-01-9	0.41 J	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71 U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Fluoranthene	206-44-0	0.71 U	0.71	1.8	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71 U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71 U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19	1
10138	Phenanthrene	85-01-8	0.71 U	0.71	1.8	1
10138	Pyrene	129-00-0	0.71 U	0.71	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.6	1
10401	2,4-DB	94-82-6	1.1 J	0.66	1.8	1
10401	Dicamba	1918-00-9	0.43 U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85 U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85 U	0.85	1.8	1
10401	MCPA	94-74-6	81 U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	91 J	80	270	1
10401	2,4,5-T	93-76-5	0.087 U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080 U	0.080	0.18	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14205 SDG#: DE038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8081A						
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.36 J	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.13 J	0.070	0.36	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.15 J	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
The LCS recoveries for various compounds are outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.35 U	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	18,300	5.26	20.9	1
07914	Boron	7440-42-8	7.44	0.930	5.23	1
01650	Calcium	7440-70-2	3,390	6.41	20.9	1
01654	Iron	7439-89-6	24,400	4.92	20.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14205 SDG#: DE038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	27.2	0.23	2.1	1
01657	Magnesium	7439-95-4	5,400	2.65	10.5	1
06958	Manganese	7439-96-5	339	0.0815	0.523	1
10145	Phosphorus	7723-14-0	487	0.585	10.5	1
01662	Potassium	7440-09-7	2,650	18.8	52.3	1
01667	Sodium	7440-23-5	77.6 J	39.0	105	1
07968	Strontium	7440-24-6	18.9	0.0648	0.523	1
06969	Tin	7440-31-5	3.07 J	1.05	10.5	1
06970	Titanium	7440-32-6	1,380	0.397	1.05	1
10146	Zirconium	7440-67-7	1.88 J	0.878	5.23	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.125 J	0.0633	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	6.72	0.0633	0.422	2
06126	Barium	7440-39-3	116	0.114	0.422	2
06127	Beryllium	7440-41-7	0.664	0.0169	0.106	2
06128	Cadmium	7440-43-9	0.120	0.0380	0.106	2
06131	Chromium	7440-47-3	24.4	0.127	0.422	2
06132	Cobalt	7440-48-4	6.99	0.0211	0.106	2
06133	Copper	7440-50-8	9.29	0.0697	0.422	2
06135	Lead	7439-92-1	6.58	0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.518	0.0528	0.106	2
06139	Nickel	7440-02-0	13.9	0.106	0.422	2
06141	Selenium	7782-49-2	0.144 J	0.0422	0.422	2
06142	Silver	7440-22-4	0.0225 J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.289	0.0317	0.106	2
06148	Vanadium	7440-62-2	46.6	0.0232	0.106	2
06149	Zinc	7440-66-6	61.6	0.591	3.17	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0042 J	0.0029	0.102	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5	0.85	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.0	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	418	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14205 SDG#: DE038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.67	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 11:56	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 15:33	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 23:38	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 00:32	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 09:58	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:01	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:45	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:01	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14205 SDG#: DE038-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:56	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:56	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:45	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:55	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:55	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:55	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:48	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 07:13	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 20:19	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 18:57	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14305 SDG#: DE038-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170	1
04688	4-Chloroaniline	106-47-8	69	U 69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	690	U 690	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U 17	350	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	35	U 35	170	1
04688	4-Methylphenol	106-44-5	35	U 35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	35	U 35	170	1
04688	4-Nitroaniline	100-01-6	69	U 69	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14305 SDG#: DE038-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17 U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17 U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69 U	0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.7	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.69 U	0.69	1.7	1
10138	Benzo(a)pyrene	50-32-8	0.69 U	0.69	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	0.69 U	0.69	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.69 U	0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.69 U	0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.2 U	6.2	19	1
10138	Di-n-butylphthalate	84-74-2	6.2 U	6.2	19	1
10138	Chrysene	218-01-9	0.57 J	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.69 U	0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.2 U	6.2	19	1
10138	Dimethylphthalate	131-11-3	6.2 U	6.2	19	1
10138	Fluoranthene	206-44-0	1.1 J	0.69	1.7	1
10138	Fluorene	86-73-7	0.69 U	0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.69 U	0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69 U	0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69 U	0.69	1.7	1
10138	Naphthalene	91-20-3	0.69 U	0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69 U	0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.2 U	6.2	19	1
10138	Phenanthrene	85-01-8	0.69 U	0.69	1.7	1
10138	Pyrene	129-00-0	0.88 J	0.69	1.7	1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.2 U	1.2	3.7	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.3	1
10401	2,4-DB	94-82-6	3.7 U	3.7	3.7	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.2	1
10401	Dinoseb	88-85-7	0.83 U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83 U	0.83	1.8	1
10401	MCPA	94-74-6	79 U	79	260	1
10401	MCPP (Mecoprop)	93-65-2	370	78	260	1
10401	2,4,5-T	93-76-5	0.085 U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.078 U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14305 SDG#: DE038-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.062 U	0.062	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035 U	0.035	0.17	1
01363	Chlordane	57-74-9	0.83 U	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.069 U	0.069	0.35	1
01363	p,p-DDE	72-55-9	0.069 U	0.069	0.35	1
01363	p,p-DDT	50-29-3	0.069 U	0.069	0.35	1
01363	Delta BHC	319-86-8	0.037 U	0.037	0.17	1
01363	Dieldrin	60-57-1	0.069 U	0.069	0.35	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.10 U	0.10	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.35	1
01363	Endrin	72-20-8	0.069 U	0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.16 U	0.16	0.35	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.062 U	0.062	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.044 U	0.044	0.17	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.21 U	0.21	0.35	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.1 J	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52 U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54 U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52 U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8	1
10225	PCB-1254	11097-69-1	0.67 J	0.34	1.8	1
10225	PCB-1260	11096-82-5	0.51 J	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14305 SDG#: DE038-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,700	5.17	20.6	1
07914	Boron	7440-42-8	8.39	0.915	5.14	1
01650	Calcium	7440-70-2	2,770	6.30	20.6	1
01654	Iron	7439-89-6	22,900	4.84	20.6	1
01656	Lithium	7439-93-2	23.8	0.23	2.1	1
01657	Magnesium	7439-95-4	4,560	2.61	10.3	1
06958	Manganese	7439-96-5	306	0.0802	0.514	1
10145	Phosphorus	7723-14-0	778	0.576	10.3	1
01662	Potassium	7440-09-7	3,870	18.5	51.4	1
01667	Sodium	7440-23-5	70.1 J	38.3	103	1
07968	Strontium	7440-24-6	17.0	0.0637	0.514	1
06969	Tin	7440-31-5	2.62 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,270	0.391	1.03	1
10146	Zirconium	7440-67-7	1.72 J	0.864	5.14	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0659 J	0.0617	0.206	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.52	0.0617	0.411	2
06126	Barium	7440-39-3	90.8	0.111	0.411	2
06127	Beryllium	7440-41-7	0.620	0.0165	0.103	2
06128	Cadmium	7440-43-9	0.0929 J	0.0370	0.103	2
06131	Chromium	7440-47-3	20.1	0.123	0.411	2
06132	Cobalt	7440-48-4	5.26	0.0206	0.103	2
06133	Copper	7440-50-8	9.59	0.0679	0.411	2
06135	Lead	7439-92-1	5.37	0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.558	0.0514	0.103	2
06139	Nickel	7440-02-0	12.2	0.103	0.411	2
06141	Selenium	7782-49-2	0.112 J	0.0411	0.411	2
06142	Silver	7440-22-4	0.0330 J	0.0123	0.103	2
06145	Thallium	7440-28-0	0.200	0.0308	0.103	2
06148	Vanadium	7440-62-2	36.0	0.0226	0.103	2
06149	Zinc	7440-66-6	57.2	0.576	3.08	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0029 U	0.0029	0.100	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	0.83	1.0	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.3 U	9.3	31.2	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14305 SDG#: DE038-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	436	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.15	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	3.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 12:30	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 16:05	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 00:05	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 00:46	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/24/2010 00:45	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 10:16	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:04	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:49	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

14305 SDG#: DE038-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:04	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:00	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:00	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:49	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:58	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:58	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:58	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:49	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 07:56	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 20:43	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 19:29	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12305 SDG#: DE038-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Butylbenzylphthalate	85-68-7	21	J 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	89	J 18	350	1
04688	Fluoranthene	206-44-0	33	J 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12305 SDG#: DE038-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1
04688	Phenanthrene	85-01-8	22	J 18	180	1
04688	Phenol	108-95-2	18	U 18	180	1
04688	Pyrene	129-00-0	30	J 18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180	1
GC/MS	Semivolatiles SW-846 8270C SIM		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8	1
10138	Acenaphthylene	208-96-8	1.0	J 0.35	1.8	1
10138	Anthracene	120-12-7	3.1	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	11	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	9.4	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	18	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	4.5	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	7.9	0.71	1.8	1
10138	Di-n-butylphthalate	84-74-2	12	J 6.4	19	1
10138	Chrysene	218-01-9	22	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.1	J 0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19	1
10138	Fluorene	86-73-7	1.2	J 0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.0	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	3.2	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	3.6	0.71	1.8	1
10138	Naphthalene	91-20-3	2.3	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U 0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U 6.4	19	1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U 1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U 4.7	9.6	1
10401	2,4-DB	94-82-6	4.7	U 4.7	4.7	1
10401	Dicamba	1918-00-9	0.51	J 0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U 0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U 0.85	1.8	1
10401	MCPA	94-74-6	81	U 81	270	1
10401	MCPP (Mecoprop)	93-65-2	240	J 80	270	1
10401	2,4,5-T	93-76-5	0.087	U 0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U 0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12305 SDG#: DE038-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs						
	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.46	0.036	0.18	1
01363	Beta BHC	319-85-7	0.097 U	0.097	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36	1
01363	p,p-DDE	72-55-9	3.2	0.35	1.8	5
01363	p,p-DDT	50-29-3	4.2	0.35	1.8	5
01363	Delta BHC	319-86-8	0.12 J	0.038	0.18	1
01363	Dieldrin	60-57-1	1.2 U	1.2	1.2	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	2.2	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.27	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.45	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
The LCS recoveries for various compounds are outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram, the values reported dieldrin represent the lowest reporting limits attainable. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: beta-BHC. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12305 SDG#: DE038-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.35 U	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	14,200	5.15	20.5	1
07914	Boron	7440-42-8	8.17	0.911	5.12	1
01650	Calcium	7440-70-2	2,760	6.28	20.5	1
01654	Iron	7439-89-6	19,600	4.82	20.5	1
01656	Lithium	7439-93-2	20.3	0.23	2.0	1
01657	Magnesium	7439-95-4	4,130	2.60	10.2	1
06958	Manganese	7439-96-5	275	0.0799	0.512	1
10145	Phosphorus	7723-14-0	449	0.573	10.2	1
01662	Potassium	7440-09-7	2,780	18.4	51.2	1
01667	Sodium	7440-23-5	75.6 J	38.2	102	1
07968	Strontium	7440-24-6	18.6	0.0635	0.512	1
06969	Tin	7440-31-5	2.76 J	1.02	10.2	1
06970	Titanium	7440-32-6	1,130	0.389	1.02	1
10146	Zirconium	7440-67-7	1.69 J	0.860	5.12	1
SW-846 6020 mg/kg mg/kg mg/kg						
06124	Antimony	7440-36-0	0.353	0.0626	0.209	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.41	0.0626	0.418	2
06126	Barium	7440-39-3	114	0.113	0.418	2
06127	Beryllium	7440-41-7	0.618	0.0167	0.104	2
06128	Cadmium	7440-43-9	0.280	0.0376	0.104	2
06131	Chromium	7440-47-3	26.2	0.125	0.418	2
06132	Cobalt	7440-48-4	7.37	0.0209	0.104	2
06133	Copper	7440-50-8	13.4	0.0689	0.418	2
06135	Lead	7439-92-1	44.4	0.0109	0.209	2
06138	Molybdenum	7439-98-7	1.06	0.0522	0.104	2
06139	Nickel	7440-02-0	16.2	0.104	0.418	2
06141	Selenium	7782-49-2	0.209 J	0.0418	0.418	2
06142	Silver	7440-22-4	0.0993 J	0.0125	0.104	2
06145	Thallium	7440-28-0	0.186	0.0313	0.104	2
06148	Vanadium	7440-62-2	42.4	0.0230	0.104	2
06149	Zinc	7440-66-6	105	0.585	3.13	2
SW-846 7471A mg/kg mg/kg mg/kg						
00159	Mercury	7439-97-6	0.0225 J	0.0029	0.0995	1
Wet Chemistry EPA 300.0 mg/kg mg/kg mg/kg						
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	0.85	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12305 SDG#: DE038-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 314.0			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	31.9	1
SW-846 7199			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.66 J	0.21	1.1	1
ASTM D1498			mV	mV	mV	
01821	Oxidation Reduction Potential n.a. The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.		449	10.0	10.0	1
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.40	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified			%	%	%	
11624	28a Moisture Content by 160.3 n.a. "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.		6.1	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 13:05	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 16:37	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 00:33	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 01:00	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/16/2011 21:43	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 10:35	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12305 SDG#: DE038-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:08	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:53	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:08	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:04	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:04	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:53	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:08	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/31/2010 06:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:08	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:08	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/31/2010 06:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:50	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 08:10	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 21:07	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 19:53	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12305 SDG#: DE038-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12405 SDG#: DE038-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	70	U 70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	350	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	70	U 70	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12405 SDG#: DE038-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70 U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.70 U	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.70 U	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.70 U	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.70 U	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.70 U	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3 U	6.3	19	1
10138	Chrysene	218-01-9	0.82 J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70 U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	1.1 J	0.70	1.8	1
10138	Fluorene	86-73-7	0.70 U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70 U	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.70 U	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.70 U	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70 U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	0.77 J	0.70	1.8	1
10138	Pyrene	129-00-0	1.2 J	0.70	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.5	1
10401	2,4-DB	94-82-6	0.65 U	0.65	1.8	1
10401	Dicamba	1918-00-9	0.52 U	0.52	1.3	1
10401	Dinoseb	88-85-7	1.5 U	1.5	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	47	0.84	1.8	1
10401	MCPA	94-74-6	80 U	80	260	1
10401	MCPP (Mecoprop)	93-65-2	200 U	200	260	1
10401	2,4,5-T	93-76-5	0.086 U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079 U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12405 SDG#: DE038-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.84 U	0.84	3.6	1
01363	p,p-DDD	72-54-8	1.5 U	1.5	1.5	1
01363	p,p-DDE	72-55-9	0.55 U	0.55	0.55	1
01363	p,p-DDT	50-29-3	1.7 U	1.7	1.7	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.35 U	0.35	0.36	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.093 U	0.093	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	4.8	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	10	0.35	1.8	1
10225	PCB-1260	11096-82-5	3.5	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12405 SDG#: DE038-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,600	5.15	20.5	1
07914	Boron	7440-42-8	9.25	0.911	5.12	1
01650	Calcium	7440-70-2	3,280	6.28	20.5	1
01654	Iron	7439-89-6	25,900	4.82	20.5	1
01656	Lithium	7439-93-2	25.3	0.23	2.0	1
01657	Magnesium	7439-95-4	5,200	2.60	10.2	1
06958	Manganese	7439-96-5	375	0.0799	0.512	1
10145	Phosphorus	7723-14-0	584	0.574	10.2	1
01662	Potassium	7440-09-7	4,950	18.4	51.2	1
01667	Sodium	7440-23-5	83.6 J	38.2	102	1
07968	Strontium	7440-24-6	22.7	0.0635	0.512	1
06969	Tin	7440-31-5	3.05 J	1.02	10.2	1
06970	Titanium	7440-32-6	1,470	0.389	1.02	1
10146	Zirconium	7440-67-7	2.30 J	0.860	5.12	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.238	0.0627	0.209	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.25	0.0627	0.418	2
06126	Barium	7440-39-3	176	0.113	0.418	2
06127	Beryllium	7440-41-7	0.841	0.0167	0.104	2
06128	Cadmium	7440-43-9	0.359	0.0376	0.104	2
06131	Chromium	7440-47-3	32.2	0.125	0.418	2
06132	Cobalt	7440-48-4	8.02	0.0209	0.104	2
06133	Copper	7440-50-8	16.9	0.0689	0.418	2
06135	Lead	7439-92-1	17.7	0.0109	0.209	2
06138	Molybdenum	7439-98-7	0.937	0.0522	0.104	2
06139	Nickel	7440-02-0	18.6	0.104	0.418	2
06141	Selenium	7782-49-2	0.181 J	0.0418	0.418	2
06142	Silver	7440-22-4	0.0973 J	0.0125	0.104	2
06145	Thallium	7440-28-0	0.348	0.0313	0.104	2
06148	Vanadium	7440-62-2	55.1	0.0230	0.104	2
06149	Zinc	7440-66-6	100	0.585	3.13	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0143 J	0.0030	0.105	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2	0.84	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.6	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12405 SDG#: DE038-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
05892	3a Cr VI by EPA 7199	18540-29-9	mg/kg 0.59 J	mg/kg 0.21	mg/kg 1.1	1
ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	mV 478	mV 10.0	mV 10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	Std. Units 6.79	Std. Units 0.0100	Std. Units 0.0100	1
Wet Chemistry						
11624	28a Moisture Content by 160.3	n.a.	% 5.2	% 0.50	% 0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 13:40	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 17:09	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 01:55	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 01:15	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/24/2010 02:37	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 10:53	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12405 SDG#: DE038-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:11	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:57	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:11	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:08	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:08	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:57	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:11	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/31/2010 07:00	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:11	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:11	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:54	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 08:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 21:31	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 20:09	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

12405 SDG#: DE038-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

30905 SDG#: DE038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzo(a)anthracene	56-55-3	20	J 17	170	1
04688	Benzo(a)pyrene	50-32-8	18	J 17	170	1
04688	Benzo(b)fluoranthene	205-99-2	17	J 17	170	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170	1
04688	4-Chloroaniline	106-47-8	69	U 69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	690	U 690	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U 17	350	1
04688	Fluoranthene	206-44-0	18	J 17	170	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U 69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	35	U 35	170	1
04688	4-Methylphenol	106-44-5	35	U 35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	35	U 35	170	1
04688	4-Nitroaniline	100-01-6	69	U 69	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

30905 SDG#: DE038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1
04688	Phenol	108-95-2	17	U 17	170	1
04688	Pyrene	129-00-0	23	J 17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.69	U 0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.7	1
10138	Anthracene	120-12-7	0.52	J 0.35	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	1.9	0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	5.5	0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	7.6	J 6.3	19	1
10138	Di-n-butylphthalate	84-74-2	7.5	J 6.3	19	1
10138	Chrysene	218-01-9	9.4	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U 0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.3	U 6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U 6.3	19	1
10138	Fluorene	86-73-7	0.69	U 0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.8	0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69	U 0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69	U 0.69	1.7	1
10138	Naphthalene	91-20-3	0.69	U 0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U 0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3	U 6.3	19	1
10138	Phenanthrene	85-01-8	0.69	U 0.69	1.7	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3	U 1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U 4.6	9.4	1
10401	2,4-DB	94-82-6	0.70	J 0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U 0.42	1.3	1
10401	Dinoseb	88-85-7	0.83	U 0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83	U 0.83	1.8	1
10401	MCPA	94-74-6	79	U 79	260	1
10401	MCPP (Mecoprop)	93-65-2	78	U 78	260	1
10401	2,4,5-T	93-76-5	0.085	U 0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U 0.078	0.18	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		
01363	Aldrin	309-00-2	0.069	U 0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035	U 0.035	0.17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

30905 SDG#: DE038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035 U	0.035	0.17	1
01363	Chlordane	57-74-9	0.83 U	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.069 U	0.069	0.35	1
01363	p,p-DDE	72-55-9	0.069 U	0.069	0.35	1
01363	p,p-DDT	50-29-3	0.069 U	0.069	0.35	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.069 U	0.069	0.35	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069 U	0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.35	1
01363	Endrin	72-20-8	0.069 U	0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.11 U	0.11	0.35	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.035 U	0.035	0.17	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.094 U	0.094	0.35	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52 U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54 U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52 U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8	1
10225	PCB-1254	11097-69-1	0.34 U	0.34	1.8	1
10225	PCB-1260	11096-82-5	0.86 J	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,800	5.19	20.6	1
07914	Boron	7440-42-8	9.14	0.918	5.16	1
01650	Calcium	7440-70-2	3,950	6.32	20.6	1
01654	Iron	7439-89-6	18,000	4.86	20.6	1
01656	Lithium	7439-93-2	19.1	0.23	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

30905 SDG#: DE038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	4,380	2.62	10.3	1
06958	Manganese	7439-96-5	254	0.0804	0.516	1
10145	Phosphorus	7723-14-0	417	0.578	10.3	1
01662	Potassium	7440-09-7	2,790	18.6	51.6	1
01667	Sodium	7440-23-5	483	38.5	103	1
07968	Strontium	7440-24-6	19.2	0.0639	0.516	1
06969	Tin	7440-31-5	2.40 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,160	0.392	1.03	1
10146	Zirconium	7440-67-7	1.25 J	0.866	5.16	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.318	0.0601	0.200	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.83	0.0601	0.401	2
06126	Barium	7440-39-3	98.2	0.108	0.401	2
06127	Beryllium	7440-41-7	0.404	0.0160	0.100	2
06128	Cadmium	7440-43-9	0.114	0.0361	0.100	2
06131	Chromium	7440-47-3	17.9	0.120	0.401	2
06132	Cobalt	7440-48-4	5.45	0.0200	0.100	2
06133	Copper	7440-50-8	11.0	0.0661	0.401	2
06135	Lead	7439-92-1	5.25	0.0104	0.200	2
06138	Molybdenum	7439-98-7	0.734	0.0501	0.100	2
06139	Nickel	7440-02-0	9.84	0.100	0.401	2
06141	Selenium	7782-49-2	0.135 J	0.0401	0.401	2
06142	Silver	7440-22-4	0.0146 J	0.0120	0.100	2
06145	Thallium	7440-28-0	0.256	0.0300	0.100	2
06148	Vanadium	7440-62-2	35.5	0.0220	0.100	2
06149	Zinc	7440-66-6	73.9	0.561	3.00	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0061 J	0.0028	0.0985	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4	0.83	1.0	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.3	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.0	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	438	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

30905 SDG#: DE038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.79	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	4.0	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 14:15	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 17:41	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	01/07/2011 09:33	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 02:54	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 11:12	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:14	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 10:01	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:14	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:12	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:12	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

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14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

30905 SDG#: DE038-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 10:01	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:14	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:14	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:14	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:55	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 08:38	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 21:55	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 20:17	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31105 SDG#: DE038-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	72	U 72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	360	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	72	U 72	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	540	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31105 SDG#: DE038-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36 U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36 U	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	4.9 J	3.6	9.0	5
10138	Acenaphthylene	208-96-8	1.8 U	1.8	9.0	5
10138	Anthracene	120-12-7	1.8 U	1.8	9.0	5
10138	Benzo(a)anthracene	56-55-3	3.6 U	3.6	9.0	5
10138	Benzo(a)pyrene	50-32-8	3.6 U	3.6	9.0	5
10138	Benzo(b)fluoranthene	205-99-2	3.6 U	3.6	9.0	5
10138	Benzo(g,h,i)perylene	191-24-2	3.6 U	3.6	9.0	5
10138	Benzo(k)fluoranthene	207-08-9	3.6 U	3.6	9.0	5
10138	Butylbenzylphthalate	85-68-7	33 U	33	98	5
10138	Di-n-butylphthalate	84-74-2	33 U	33	98	5
10138	Chrysene	218-01-9	1.8 U	1.8	9.0	5
10138	Dibenz(a,h)anthracene	53-70-3	3.6 U	3.6	9.0	5
10138	Diethylphthalate	84-66-2	33 U	33	98	5
10138	Dimethylphthalate	131-11-3	120	33	98	5
10138	Fluoranthene	206-44-0	3.6 U	3.6	9.0	5
10138	Fluorene	86-73-7	3.6 U	3.6	9.0	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.6 U	3.6	9.0	5
10138	1-Methylnaphthalene	90-12-0	6.2 J	3.6	9.0	5
10138	2-Methylnaphthalene	91-57-6	9.8	3.6	9.0	5
10138	Naphthalene	91-20-3	170	3.6	9.0	5
10138	N-Nitrosodimethylamine	62-75-9	3.6 U	3.6	9.0	5
10138	Di-n-octylphthalate	117-84-0	33 U	33	98	5
10138	Phenanthrene	85-01-8	3.6 U	3.6	9.0	5
10138	Pyrene	129-00-0	3.6 U	3.6	9.0	5
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8 U	4.8	9.8	1
10401	2,4-DB	94-82-6	6.5	0.67	1.8	1
10401	Dicamba	1918-00-9	0.43 U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.87 U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87 U	0.87	1.8	1
10401	MCPA	94-74-6	150 U	150	270	1
10401	MCPP (Mecoprop)	93-65-2	81 U	81	270	1
10401	2,4,5-T	93-76-5	0.089 U	0.089	0.18	1
10401	2,4,5-TP	93-72-1	0.081 U	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31105 SDG#: DE038-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.072 U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.065 U	0.065	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037 U	0.037	0.18	1
01363	Chlordane	57-74-9	1.2 U	1.2	3.7	1
01363	p,p-DDD	72-54-8	0.30 U	0.30	0.37	1
01363	p,p-DDE	72-55-9	0.072 U	0.072	0.37	1
01363	p,p-DDT	50-29-3	0.25 U	0.25	0.37	1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.085 U	0.085	0.37	1
01363	Endosulfan I	959-98-8	0.048 U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.072 U	0.072	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072 U	0.072	0.37	1
01363	Endrin	72-20-8	0.072 U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.072 U	0.072	0.37	1
01363	Endrin Ketone	53494-70-5	0.072 U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.065 U	0.065	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037 U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8	1
01363	Mirex	2385-85-5	0.44 U	0.44	0.44	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.2	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	3.6	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.8	1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56 U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.8	1
10225	PCB-1254	11097-69-1	3.9	0.36	1.8	1
10225	PCB-1260	11096-82-5	3.9	0.36	1.8	1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.8	1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31105 SDG#: DE038-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,200	5.40	21.5	1
07914	Boron	7440-42-8	9.87	0.955	5.36	1
01650	Calcium	7440-70-2	6,910	6.58	21.5	1
01654	Iron	7439-89-6	17,800	5.05	21.5	1
01656	Lithium	7439-93-2	15.1	0.24	2.1	1
01657	Magnesium	7439-95-4	3,850	2.72	10.7	1
06958	Manganese	7439-96-5	320	0.0837	0.536	1
10145	Phosphorus	7723-14-0	503	0.601	10.7	1
01662	Potassium	7440-09-7	2,510	19.3	53.6	1
01667	Sodium	7440-23-5	389	40.0	107	1
07968	Strontium	7440-24-6	57.0	0.0665	0.536	1
06969	Tin	7440-31-5	1.88 J	1.07	10.7	1
06970	Titanium	7440-32-6	997	0.408	1.07	1
10146	Zirconium	7440-67-7	3.31 J	0.901	5.36	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.251	0.0631	0.210	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.91	0.0631	0.421	2
06126	Barium	7440-39-3	100	0.114	0.421	2
06127	Beryllium	7440-41-7	0.400	0.0168	0.105	2
06128	Cadmium	7440-43-9	0.307	0.0379	0.105	2
06131	Chromium	7440-47-3	29.7	0.126	0.421	2
06132	Cobalt	7440-48-4	5.35	0.0210	0.105	2
06133	Copper	7440-50-8	13.5	0.0694	0.421	2
06135	Lead	7439-92-1	8.67	0.0109	0.210	2
06138	Molybdenum	7439-98-7	1.16	0.0526	0.105	2
06139	Nickel	7440-02-0	13.8	0.105	0.421	2
06141	Selenium	7782-49-2	0.232 J	0.0421	0.421	2
06142	Silver	7440-22-4	0.103 J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.198	0.0316	0.105	2
06148	Vanadium	7440-62-2	36.0	0.0231	0.105	2
06149	Zinc	7440-66-6	182	1.47	7.89	5
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0132 J	0.0031	0.107	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8	0.87	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.5	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31105 SDG#: DE038-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	422	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	9.31	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	7.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 14:50	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 12:43	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 02:50	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 03:08	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/24/2010 03:14	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 12:44	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 11:16	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 10:05	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31105 SDG#: DE038-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 11:16	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:16	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:16	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 10:05	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:17	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:17	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:17	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/31/2010 07:01	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:56	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 08:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 22:19	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 20:33	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31005 SDG#: DE038-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	70	U 70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	350	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	70	U 70	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31005 SDG#: DE038-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70 U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.40 J	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	7.3	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	6.9	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	9.7	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	2.9	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	4.1	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.7 J	6.3	19	1
10138	Chrysene	218-01-9	7.2	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.82 J	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	7.2	0.70	1.8	1
10138	Fluorene	86-73-7	0.70 U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.5	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.70 U	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.70 U	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70 U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	0.99 J	0.70	1.8	1
10138	Pyrene	129-00-0	8.9	0.70	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.5	1
10401	2,4-DB	94-82-6	1.0 U	1.0	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84 U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0 U	1.0	1.8	1
10401	MCPA	94-74-6	98 J	80	260	1
10401	MCPP (Mecoprop)	93-65-2	79 U	79	260	1
10401	2,4,5-T	93-76-5	0.086 U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079 U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31005 SDG#: DE038-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	1.4 U	1.4	3.5	20
01363	Alpha BHC	319-84-6	0.72 U	0.72	3.5	20
01363	Beta BHC	319-85-7	1.3 U	1.3	3.5	20
01363	Gamma BHC - Lindane	58-89-9	0.72 U	0.72	3.5	20
01363	Chlordane	57-74-9	17 U	17	72	20
01363	p,p-DDD	72-54-8	34 U	34	34	20
01363	p,p-DDE	72-55-9	25 U	25	25	20
01363	p,p-DDT	50-29-3	19 U	19	19	20
01363	Delta BHC	319-86-8	0.76 U	0.76	3.5	20
01363	Dieldrin	60-57-1	6.5 U	6.5	7.2	20
01363	Endosulfan I	959-98-8	0.93 U	0.93	3.5	20
01363	Endosulfan II	33213-65-9	2.1 U	2.1	7.2	20
01363	Endosulfan Sulfate	1031-07-8	1.4 U	1.4	7.2	20
01363	Endrin	72-20-8	1.4 U	1.4	7.2	20
01363	Endrin Aldehyde	7421-93-4	6.3 U	6.3	7.2	20
01363	Endrin Ketone	53494-70-5	1.4 U	1.4	7.2	20
01363	Heptachlor	76-44-8	1.3 U	1.3	3.5	20
01363	Heptachlor Epoxide	1024-57-3	14 U	14	14	20
01363	Methoxychlor	72-43-5	7.2 U	7.2	35	20
01363	Mirex	2385-85-5	24 U	24	24	20
01363	Toxaphene	8001-35-2	46 U	46	140	20

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	5.7	0.35	1.8	1
10225	PCB-1260	11096-82-5	1.7 J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31005 SDG#: DE038-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,400	5.20	20.7	1
07914	Boron	7440-42-8	9.04	0.920	5.17	1
01650	Calcium	7440-70-2	3,890	6.34	20.7	1
01654	Iron	7439-89-6	19,400	4.87	20.7	1
01656	Lithium	7439-93-2	21.0	0.23	2.1	1
01657	Magnesium	7439-95-4	4,640	2.63	10.3	1
06958	Manganese	7439-96-5	273	0.0807	0.517	1
10145	Phosphorus	7723-14-0	423	0.579	10.3	1
01662	Potassium	7440-09-7	2,900	18.6	51.7	1
01667	Sodium	7440-23-5	388	38.6	103	1
07968	Strontium	7440-24-6	23.3	0.0641	0.517	1
06969	Tin	7440-31-5	2.35 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,160	0.393	1.03	1
10146	Zirconium	7440-67-7	1.64 J	0.869	5.17	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.242	0.0633	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.32	0.0633	0.422	2
06126	Barium	7440-39-3	132	0.114	0.422	2
06127	Beryllium	7440-41-7	0.498	0.0169	0.105	2
06128	Cadmium	7440-43-9	0.249	0.0380	0.105	2
06131	Chromium	7440-47-3	18.8	0.127	0.422	2
06132	Cobalt	7440-48-4	5.12	0.0211	0.105	2
06133	Copper	7440-50-8	10.5	0.0696	0.422	2
06135	Lead	7439-92-1	7.48	0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.646	0.0527	0.105	2
06139	Nickel	7440-02-0	10.7	0.105	0.422	2
06141	Selenium	7782-49-2	0.0956 J	0.0422	0.422	2
06142	Silver	7440-22-4	0.0217 J	0.0127	0.105	2
06145	Thallium	7440-28-0	0.241	0.0316	0.105	2
06148	Vanadium	7440-62-2	40.0	0.0232	0.105	2
06149	Zinc	7440-66-6	68.2	0.591	3.16	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0067 J	0.0030	0.104	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.8	0.84	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.6	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

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Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31005 SDG#: DE038-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	418	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.82	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	5.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 15:24	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 13:14	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 03:18	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 03:22	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 13:03	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:21	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 10:09	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:21	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31005 SDG#: DE038-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01645	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:23	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:23	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 10:09	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/31/2010 07:03	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:57	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 09:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 22:43	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 20:49	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31205 SDG#: DE038-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	70	U 70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	Dimethylphthalate	131-11-3	19	J 18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	350	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	70	U 70	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31205 SDG#: DE038-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Pentachlorophenol	87-86-5	180	U 180	530	1
04688	Phenol	108-95-2	18	U 18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	4.6	J 3.5	8.8	5
10138	Acenaphthylene	208-96-8	1.8	U 1.8	8.8	5
10138	Anthracene	120-12-7	1.9	J 1.8	8.8	5
10138	Benzo(a)anthracene	56-55-3	27	3.5	8.8	5
10138	Benzo(a)pyrene	50-32-8	21	3.5	8.8	5
10138	Benzo(b)fluoranthene	205-99-2	29	3.5	8.8	5
10138	Benzo(g,h,i)perylene	191-24-2	8.4	J 3.5	8.8	5
10138	Benzo(k)fluoranthene	207-08-9	12	3.5	8.8	5
10138	Butylbenzylphthalate	85-68-7	32	U 32	95	5
10138	Di-n-butylphthalate	84-74-2	32	U 32	95	5
10138	Chrysene	218-01-9	31	1.8	8.8	5
10138	Dibenz(a,h)anthracene	53-70-3	3.5	U 3.5	8.8	5
10138	Diethylphthalate	84-66-2	32	U 32	95	5
10138	Fluoranthene	206-44-0	24	3.5	8.8	5
10138	Fluorene	86-73-7	3.5	U 3.5	8.8	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	6.4	J 3.5	8.8	5
10138	1-Methylnaphthalene	90-12-0	6.1	J 3.5	8.8	5
10138	2-Methylnaphthalene	91-57-6	9.7	3.5	8.8	5
10138	Naphthalene	91-20-3	170	3.5	8.8	5
10138	N-Nitrosodimethylamine	62-75-9	3.5	U 3.5	8.8	5
10138	Di-n-octylphthalate	117-84-0	32	U 32	95	5
10138	Phenanthrene	85-01-8	4.7	J 3.5	8.8	5
10138	Pyrene	129-00-0	26	3.5	8.8	5
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3	U 1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U 4.6	9.5	1
10401	2,4-DB	94-82-6	1.6	J 0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U 0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U 0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U 0.84	1.8	1
10401	MCPA	94-74-6	91	U 91	260	1
10401	MCPP (Mecoprop)	93-65-2	81	J 79	260	1
10401	2,4,5-T	93-76-5	0.086	U 0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079	U 0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31205 SDG#: DE038-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.17	1
01363	Chlordane	57-74-9	0.84 U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.069 U	0.069	0.36	1
01363	p,p-DDE	72-55-9	0.069 U	0.069	0.36	1
01363	p,p-DDT	50-29-3	0.18 U	0.18	0.36	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.069 U	0.069	0.36	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.13 U	0.13	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.36	1
01363	Endrin	72-20-8	0.069 U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.086 U	0.086	0.36	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.036 U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.7	1
01363	Mirex	2385-85-5	0.37 U	0.37	0.37	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	5.2	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	1.0 J	0.35	1.8	1
10225	PCB-1260	11096-82-5	3.1	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,400	5.24	20.8	1
07914	Boron	7440-42-8	9.81	0.928	5.21	1
01650	Calcium	7440-70-2	4,280	6.39	20.8	1
01654	Iron	7439-89-6	18,600	4.91	20.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31205 SDG#: DE038-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	22.9	0.23	2.1	1
01657	Magnesium	7439-95-4	4,330	2.65	10.4	1
06958	Manganese	7439-96-5	261	0.0813	0.521	1
10145	Phosphorus	7723-14-0	416	0.584	10.4	1
01662	Potassium	7440-09-7	2,880	18.8	52.1	1
01667	Sodium	7440-23-5	972	38.9	104	1
07968	Strontium	7440-24-6	23.1	0.0646	0.521	1
06969	Tin	7440-31-5	2.69 J	1.04	10.4	1
06970	Titanium	7440-32-6	1,110	0.396	1.04	1
10146	Zirconium	7440-67-7	1.60 J	0.875	5.21	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.142 J	0.0613	0.204	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.44	0.0613	0.409	2
06126	Barium	7440-39-3	105	0.110	0.409	2
06127	Beryllium	7440-41-7	0.436	0.0164	0.102	2
06128	Cadmium	7440-43-9	0.241	0.0368	0.102	2
06131	Chromium	7440-47-3	22.7	0.123	0.409	2
06132	Cobalt	7440-48-4	6.05	0.0204	0.102	2
06133	Copper	7440-50-8	11.7	0.0675	0.409	2
06135	Lead	7439-92-1	6.64	0.0106	0.204	2
06138	Molybdenum	7439-98-7	0.684	0.0511	0.102	2
06139	Nickel	7440-02-0	11.9	0.102	0.409	2
06141	Selenium	7782-49-2	0.157 J	0.0409	0.409	2
06142	Silver	7440-22-4	0.0648 J	0.0123	0.102	2
06145	Thallium	7440-28-0	0.197	0.0307	0.102	2
06148	Vanadium	7440-62-2	40.2	0.0225	0.102	2
06149	Zinc	7440-66-6	82.0	0.572	3.07	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0077 J	0.0029	0.101	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.5	0.84	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.6	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	410	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31205 SDG#: DE038-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	9.23	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 15:59	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 13:46	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 03:46	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/16/2011 21:57	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/24/2010 03:51	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 13:22	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:25	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 10:13	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:25	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

31205 SDG#: DE038-19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:27	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:27	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 10:13	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:23	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:23	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:23	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/31/2010 07:05	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:58	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 09:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 23:07	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 21:05	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

02505 SDG#: DE038-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700	1
04688	Benzoic acid	65-85-0	190	U 190	560	1
04688	Benzyl alcohol	100-51-6	190	U 190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190	1
04688	4-Chloroaniline	106-47-8	74	U 74	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560	1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	370	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	74	U 74	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	37	U 37	190	1
04688	4-Methylphenol	106-44-5	37	U 37	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	37	U 37	190	1
04688	4-Nitroaniline	100-01-6	74	U 74	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	560	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

02505 SDG#: DE038-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19 U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19 U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37 U	37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37 U	37	190	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74 U	0.74	1.9	1
10138	Acenaphthylene	208-96-8	0.37 U	0.37	1.9	1
10138	Anthracene	120-12-7	0.42 J	0.37	1.9	1
10138	Benzo(a)anthracene	56-55-3	1.4 J	0.74	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.74 U	0.74	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	1.5 J	0.74	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	2.0	0.74	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.74 U	0.74	1.9	1
10138	Butylbenzylphthalate	85-68-7	8.4 J	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	7.9 J	6.7	20	1
10138	Chrysene	218-01-9	3.4	0.37	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.74 U	0.74	1.9	1
10138	Diethylphthalate	84-66-2	6.7 U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7 U	6.7	20	1
10138	Fluoranthene	206-44-0	1.6 J	0.74	1.9	1
10138	Fluorene	86-73-7	6.9	0.74	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74 U	0.74	1.9	1
10138	1-Methylnaphthalene	90-12-0	1.2 J	0.74	1.9	1
10138	2-Methylnaphthalene	91-57-6	1.2 J	0.74	1.9	1
10138	Naphthalene	91-20-3	2.9	0.74	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.74 U	0.74	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.7 U	6.7	20	1
10138	Phenanthrene	85-01-8	2.5	0.74	1.9	1
10138	Pyrene	129-00-0	2.0	0.74	1.9	1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 J	1.3	4.0	1
10401	Dalapon	75-99-0	4.9 U	4.9	10	1
10401	2,4-DB	94-82-6	9.2 U	9.2	9.2	1
10401	Dicamba	1918-00-9	0.45 U	0.45	1.3	1
10401	Dinoseb	88-85-7	0.89 U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89 U	0.89	1.9	1
10401	MCPA	94-74-6	700	85	280	1
10401	MCPP (Mecoprop)	93-65-2	84 U	84	280	1
10401	2,4,5-T	93-76-5	0.092 U	0.092	0.19	1
10401	2,4,5-TP	93-72-1	0.084 U	0.084	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

02505 SDG#: DE038-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
compounds were affected: 2,4-DB.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.16 U	0.16	0.19	1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.19	1
01363	Beta BHC	319-85-7	0.067 U	0.067	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.19	1
01363	Chlordane	57-74-9	0.89 U	0.89	3.8	1
01363	p,p-DDD	72-54-8	1.5 U	1.5	1.5	1
01363	p,p-DDE	72-55-9	1.3 U	1.3	1.3	1
01363	p,p-DDT	50-29-3	2.1 U	2.1	2.1	1
01363	Delta BHC	319-86-8	0.22	0.040	0.19	1
01363	Dieldrin	60-57-1	0.33 U	0.33	0.33	1
01363	Endosulfan I	959-98-8	0.18 U	0.18	0.19	1
01363	Endosulfan II	33213-65-9	0.66 U	0.66	0.66	1
01363	Endosulfan Sulfate	1031-07-8	0.074 U	0.074	0.38	1
01363	Endrin	72-20-8	0.074 U	0.074	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.75 U	0.75	0.75	1
01363	Endrin Ketone	53494-70-5	0.074 U	0.074	0.38	1
01363	Heptachlor	76-44-8	0.18 U	0.18	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.10 U	0.10	0.19	1
01363	Methoxychlor	72-43-5	1.1 U	1.1	1.9	1
01363	Mirex	2385-85-5	0.60 U	0.60	0.60	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.4	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9	1
10225	PCB-1254	11097-69-1	1.2 J	0.37	1.9	1
10225	PCB-1260	11096-82-5	0.37 U	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,900	5.45	21.7	1
07914	Boron	7440-42-8	9.33	0.964	5.42	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

02505 SDG#: DE038-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	3,940	6.64	21.7	1
01654	Iron	7439-89-6	19,900	5.10	21.7	1
01656	Lithium	7439-93-2	22.2	0.24	2.2	1
01657	Magnesium	7439-95-4	5,230	2.75	10.8	1
06958	Manganese	7439-96-5	311	0.0845	0.542	1
10145	Phosphorus	7723-14-0	470	0.607	10.8	1
01662	Potassium	7440-09-7	3,320	19.5	54.2	1
01667	Sodium	7440-23-5	67.1 J	40.4	108	1
07968	Strontium	7440-24-6	17.9	0.0672	0.542	1
06969	Tin	7440-31-5	2.54 J	1.08	10.8	1
06970	Titanium	7440-32-6	1,250	0.412	1.08	1
10146	Zirconium	7440-67-7	1.29 J	0.910	5.42	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.136 J	0.0657	0.219	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.21	0.0657	0.438	2
06126	Barium	7440-39-3	118	0.118	0.438	2
06127	Beryllium	7440-41-7	0.488	0.0175	0.109	2
06128	Cadmium	7440-43-9	0.202	0.0394	0.109	2
06131	Chromium	7440-47-3	24.1	0.131	0.438	2
06132	Cobalt	7440-48-4	6.33	0.0219	0.109	2
06133	Copper	7440-50-8	10.6	0.0722	0.438	2
06135	Lead	7439-92-1	14.0	0.0114	0.219	2
06138	Molybdenum	7439-98-7	0.508	0.0547	0.109	2
06139	Nickel	7440-02-0	15.3	0.109	0.438	2
06141	Selenium	7782-49-2	0.160 J	0.0438	0.438	2
06142	Silver	7440-22-4	0.0400 J	0.0131	0.109	2
06145	Thallium	7440-28-0	0.240	0.0328	0.109	2
06148	Vanadium	7440-62-2	47.0	0.0241	0.109	2
06149	Zinc	7440-66-6	70.5	0.613	3.28	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0102 J	0.0031	0.110	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.5	0.89	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.0 U	10.0	33.5	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1	1
	ASTM D1498		mV	mV	mV	

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

02505 SDG#: DE038-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	472	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.56	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	10.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 16:34	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 14:18	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	01/07/2011 10:01	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 03:51	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 13:40	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/26/2011 14:07

02505 SDG#: DE038-20*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:26	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/31/2010 07:07	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:26	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:26	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:59	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 09:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 23:31	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 21:21	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10354SLE026									
Acenaphthene	17	U	17.	170	ug/kg	99	76-111		
Acenaphthylene	17	U	17.	170	ug/kg	99	75-122		
Aniline	170	170.	500	ug/kg	48		10-107		
Anthracene	17	U	17.	170	ug/kg	96	76-112		
Benzidine	1,200	1,200.	3,300	ug/kg	38		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	101	73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	87	69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	88	61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	84	65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	89	67-125		
Benzoic acid	170	170.	500	ug/kg	94		10-154		
Benzyl alcohol	170	170.	500	ug/kg	94		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	94	79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	103	75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	94	79-112		
Carbazole	17	U	17.	170	ug/kg	95	77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	98	74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	59	10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	101	70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	96	70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	93	68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	87	67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	100	72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	98	79-110		
Chrysene	17	U	17.	170	ug/kg	97	76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	87	70-128		
Dibenzofuran	17	U	17.	170	ug/kg	98	79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	91	79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	93	70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	90	74-106		
3,3'-Dichlorobenzidine	100	100.	330	ug/kg	39		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	98	75-111		
Diethylphthalate	17	U	17.	170	ug/kg	100	76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	100	72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	107	70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	100	77-109		
4,6-Dinitro-2-methylphenol	170	170.	500	ug/kg	88		53-110		
2,4-Dinitrophenol	670	670.	2,000	ug/kg	86		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	101	73-115		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	102		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	104		77-111		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	104		75-117		
Fluoranthene	17 U	17.	170	ug/kg	94		78-116		
Fluorene	17 U	17.	170	ug/kg	99		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	98		78-116		
Hexachlorobutadiene	67 U	67.	170	ug/kg	98		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	106		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	92		68-105		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	87		64-119		
Isophorone	17 U	17.	170	ug/kg	97		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	98		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	92		76-105		
2-Methylphenol	33 U	33.	170	ug/kg	98		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	95		66-117		
Naphthalene	17 U	17.	170	ug/kg	92		73-106		
2-Nitroaniline	17 U	17.	170	ug/kg	104		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	91		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	64		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	102		71-104		
2-Nitrophenol	17 U	17.	170	ug/kg	100		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	101		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	89		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	89		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	97		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	88		68-130		
Pentachlorophenol	170 U	170.	500	ug/kg	84		35-106		
Phenanthrene	17 U	17.	170	ug/kg	96		77-113		
Phenol	17 U	17.	170	ug/kg	101		58-112		
Pyrene	17 U	17.	170	ug/kg	108		75-115		
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	95		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	98		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	103		78-111		
Batch number: 10354SLH026 Sample number(s): 6164621-6164624, 6164626-6164643									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	76		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	79		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	78		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	77		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	75		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	87		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	69		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	81		66-137		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	82		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	95		84-132		
Chrysene	0.33 U	0.33	1.7	ug/kg	80		79-120		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	73		62-142		
Diethylphthalate	6.0 U	6.0	18	ug/kg	88		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	90		70-130		
Bis(2-Ethylhexyl)phthalate	6.6 J	6.0	18	ug/kg	77		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	80		78-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	79		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	71		62-141		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	85		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	75		62-120		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

<u>Analysis Name</u>	<u>Blank Result</u>		<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Naphthalene	0.67	U	0.67	1.7	ug/kg	79		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	82		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	75		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	75		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	73		56-121		
Batch number: 103560027A Sample number(s): 6164621-6164624, 6164626-6164643										
2,4-D	1.2	U	1.2	3.6	ug/kg	137		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	64		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	100		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	88		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	9*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	112		60-141		
MCPA	76	U	76.	250	ug/kg	112		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	98		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	100		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	88		48-138		
Batch number: 103500020A Sample number(s): 6164634										
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	99		85-115		
Batch number: 103540018A Sample number(s): 6164621-6164624, 6164626-6164643										
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	94	66*	75-125	35*	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	117		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	137		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103550007A Sample number(s): 6164621-6164624, 6164626-6164643										
Aldrin	0.066	U	0.066	0.17	ug/kg	142*		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	130		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	116		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	116		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	135		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	143*		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	163*		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	131		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	128		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	119		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	110		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	137		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	139*		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	100		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	131		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	102		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	123		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	176*		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103511026003A	Sample number(s): 6164621-6164643								
Antimony	0.0600 U	0.0600	0.200	mg/kg	117		11-208		
Arsenic	0.0600 U	0.0600	0.400	mg/kg	106		80-120		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	100		82-118		
Cadmium	0.0360 U	0.0360	0.100	mg/kg	103		82-118		
Chromium	0.120 U	0.120	0.400	mg/kg	109		80-120		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	110		82-118		
Copper	0.0941 J	0.0660	0.400	mg/kg	112		80-120		
Lead	0.0104 U	0.0104	0.200	mg/kg	97		80-120		
Nickel	0.100 U	0.100	0.400	mg/kg	112		80-120		
Silver	0.0120 U	0.0120	0.100	mg/kg	101		66-134		
Thallium	0.0300 U	0.0300	0.100	mg/kg	103		81-119		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	102		90-110		
Zinc	0.560 U	0.560	3.00	mg/kg	108		78-122		
Batch number: 103511026003B	Sample number(s): 6164621-6164643								
Selenium	0.0400 U	0.0400	0.400	mg/kg	102		79-122		
Batch number: 103511026003C	Sample number(s): 6164621-6164643								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	113		78-122		
Batch number: 103511026003D	Sample number(s): 6164621-6164643								
Barium	0.108 U	0.108	0.400	mg/kg	101		79-121		
Batch number: 103515708008	Sample number(s): 6164621-6164643								
Aluminum	5.03 U	5.03	20.0	mg/kg	98		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	96		78-110		
Calcium	7.00 J	6.13	20.0	mg/kg	105		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	99		61-110		
Lithium	0.33 J	0.22	2.0	mg/kg	108		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	108		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	103		81-119		
Phosphorus	1.61 J	0.560	10.0	mg/kg	105		80-120		
Potassium	18.0 U	18.0	50.0	mg/kg	105		78-110		
Sodium	37.3 U	37.3	100	mg/kg	109		87-110		
Strontium	0.0620 U	0.0620	0.500	mg/kg	100		79-121		
Tin	1.55 J	1.00	10.0	mg/kg	101		90-114		
Titanium	0.380 U	0.380	1.00	mg/kg	108		80-120		
Zirconium	0.840 U	0.840	5.00	mg/kg	109		80-120		
Batch number: 103515711004	Sample number(s): 6164621-6164643								
Mercury	0.0027 U	0.0027	0.0944	mg/kg	98		88-123		
Batch number: 10363243202A	Sample number(s): 6164621-6164623, 6164625-6164643								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	95		80-120		
Batch number: 11001001202A	Sample number(s): 6164621-6164623, 6164625-6164633								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	99		85-115		
Batch number: 11001001202B	Sample number(s): 6164634-6164643								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	99		85-115		
Batch number: 11006006203A	Sample number(s): 6164621-6164623, 6164625-6164633								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	105		90-110		
Batch number: 11006006203B	Sample number(s): 6164634-6164643								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	105		90-110		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 10350039401B 22a pH by 9045C	Sample number(s): 6164621-6164622, 6164625-6164627				100		95-105		
Batch number: 10350039402A 22a pH by 9045C	Sample number(s): 6164628-6164636				100		95-105		
Batch number: 10350039402B 22a pH by 9045C	Sample number(s): 6164637-6164643				100		95-105		
Batch number: 10350182101B Oxidation Reduction Potential	Sample number(s): 6164621-6164622, 6164625-6164627				100		98-102		
Batch number: 10350182102A Oxidation Reduction Potential	Sample number(s): 6164628-6164636				100		98-102		
Batch number: 10350182102B Oxidation Reduction Potential	Sample number(s): 6164637-6164643				100		98-102		
Batch number: 10355162401A 28a Moisture Content by 160.3	Sample number(s): 6164621-6164634				100		80-120		
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		
Batch number: 10355162401B 28a Moisture Content by 160.3	Sample number(s): 6164635-6164643				100		80-120		

Sample Matrix Quality Control

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<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 10354SLE026	Sample number(s): 6164621-6164624, 6164626-6164643 UNSPK: 6164622								
Acenaphthene	99	98	75-115	0	30				
Acenaphthylene	104	102	49-126	2	30				
Aniline	60	52	14-114	14	30				
Anthracene	100	99	75-115	1	30				
Benzidine	28*	35	35-141	23	30				
Benzo(a)anthracene	103	100	65-122	3	30				
Benzo(a)pyrene	91	87	57-126	5	30				
Benzo(b)fluoranthene	94	87	59-125	8	30				
Benzo(g,h,i)perylene	90	87	59-127	3	30				
Benzo(k)fluoranthene	92	88	56-132	5	30				
Benzoic acid	46	37	10-173	21	30				
Benzyl alcohol	101	96	55-123	4	30				
4-Bromophenyl-phenylether	96	94	67-129	2	30				
Butylbenzylphthalate	112	106	73-134	5	30				
Di-n-butylphthalate	101	99	67-123	2	30				
Carbazole	100	99	64-120	1	30				
4-Chloro-3-methylphenol	100	99	53-130	1	30				
4-Chloroaniline	78	70	23-95	10	30				
bis(2-Chloroethoxy)methane	101	102	54-117	2	30				
bis(2-Chloroethyl)ether	99	96	60-116	3	30				

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Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
bis(2-Chloroisopropyl)ether	96	94	55-142	3	30				
2-Chloronaphthalene	82	88	50-141	7	30				
2-Chlorophenol	104	103	73-121	1	30				
4-Chlorophenyl-phenylether	98	98	64-119	0	30				
Chrysene	101	98	62-128	3	30				
Dibenz(a,h)anthracene	94	88	65-125	7	30				
Dibenzofuran	98	99	71-112	1	30				
1,2-Dichlorobenzene	95	91	66-108	5	30				
1,3-Dichlorobenzene	92	89	63-109	3	30				
1,4-Dichlorobenzene	93	89	53-113	4	30				
3,3'-Dichlorobenzidine	70	59	25-123	18	30				
2,4-Dichlorophenol	101	101	78-117	0	30				
Diethylphthalate	100	100	66-118	0	30				
2,4-Dimethylphenol	101	99	56-130	2	30				
3,5-Dimethylphenol	110	109	70-130	1	30				
Dimethylphthalate	101	99	64-118	1	30				
4,6-Dinitro-2-methylphenol	57	49	10-148	16	30				
2,4-Dinitrophenol	30	24	20-143	24	30				
2,4-Dinitrotoluene	101	100	57-114	1	30				
2,6-Dinitrotoluene	103	102	69-123	1	30				
1,2-Diphenylhydrazine	110	106	71-129	3	30				
bis(2-Ethylhexyl)phthalate	112	106	63-122	5	30				
Fluoranthene	97	97	59-122	0	30				
Fluorene	96	97	60-125	2	30				
Hexachlorobenzene	102	98	61-111	4	30				
Hexachlorobutadiene	96	93	62-120	3	30				
Hexachlorocyclopentadiene	80	76	10-153	5	30				
Hexachloroethane	90	90	57-109	0	30				
Indeno(1,2,3-cd)pyrene	92	88	61-126	4	30				
Isophorone	97	95	51-118	2	30				
1-Methylnaphthalene	100	99	73-112	2	30				
2-Methylnaphthalene	94	92	76-114	3	30				
2-Methylphenol	102	103	47-142	1	30				
4-Methylphenol	102	98	55-126	4	30				
Naphthalene	93	90	72-116	3	30				
2-Nitroaniline	105	108	67-125	3	30				
3-Nitroaniline	100	98	59-122	2	30				
4-Nitroaniline	76	73	52-112	4	30				
Nitrobenzene	102	100	51-114	2	30				
2-Nitrophenol	98	94	74-115	4	30				
4-Nitrophenol	98	98	39-133	0	30				
N-Nitroso-di-n-propylamine	95	92	60-116	3	30				
N-Nitrosodimethylamine	89	88	47-116	1	30				
N-Nitrosodiphenylamine	102	100	86-145	2	30				
Di-n-octylphthalate	97	91	56-126	7	30				
Pentachlorophenol	77	69	17-149	11	30				
Phenanthrene	100	98	65-125	2	30				
Phenol	108	104	58-126	4	30				
Pyrene	110	110	51-151	0	30				
1,2,4-Trichlorobenzene	96	96	72-115	1	30				
2,4,5-Trichlorophenol	101	101	34-139	1	30				
2,4,6-Trichlorophenol	104	105	49-140	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10354SLH026	Sample number(s): 6164621-6164624, 6164626-6164643 UNSPK: 6164622								
Acenaphthene	75	77	63-105	3	30				
Acenaphthylene	77	79	55-126	3	30				
Anthracene	77	79	46-136	3	30				
Benzo(a)anthracene	69	75	39-144	7	30				
Benzo(a)pyrene	56	63	34-156	9	30				
Benzo(b)fluoranthene	53	60	43-155	9	30				
Benzo(g,h,i)perylene	41	56	33-141	23	30				
Benzo(k)fluoranthene	61	63	42-144	3	30				
Butylbenzylphthalate	97	101	73-140	4	30				
Di-n-butylphthalate	85	87	78-160	2	30				
Chrysene	29	55	29-156	28	30				
Dibenz(a,h)anthracene	54	65	41-130	18	30				
Diethylphthalate	87	90	87-131	3	30				
Dimethylphthalate	87	92	74-118	5	30				
Bis(2-Ethylhexyl)phthalate	67	75	39-167	7	30				
Fluoranthene	65	69	26-166	4	30				
Fluorene	79	80	45-121	2	30				
Indeno(1,2,3-cd)pyrene	47	60	21-143	21	30				
1-Methylnaphthalene	82	82	72-123	0	30				
2-Methylnaphthalene	71	72	28-121	1	30				
Naphthalene	76	76	61-102	0	30				
N-Nitrosodimethylamine	73	75	48-113	3	30				
Di-n-octylphthalate	70	77	40-192	7	30				
Phenanthrene	67	72	12-165	6	30				
Pyrene	57	66	15-153	10	30				
Batch number: 103560027A	Sample number(s): 6164621-6164624, 6164626-6164643 UNSPK: 6164622								
2,4-D	131	93	28-161	34	35				
Dalapon	72	0*	12-86	200*	50				
2,4-DB	59	83	20-170	21	50				
Dicamba	104	88	33-120	16	50				
Dinoseb	9	6	1-44	40*	35				
2,4-DP (Dichlorprop)	102	113	55-141	11	50				
MCPA	27*	119	31-184	59*	50				
MCPP (Mecoprop)	63	71	16-174	9	50				
2,4,5-T	90	65	25-132	33	35				
2,4,5-TP	76	100	10-183	27	35				
Batch number: 103500020A	Sample number(s): 6164634 UNSPK: P164948								
6a Perchlorate EPA 6850	100	100	80-120	0	20				
Batch number: 103540018A	Sample number(s): 6164621-6164624, 6164626-6164643 UNSPK: 6164622								
PCB-1016	215*	143	29-146	41	50				
PCB-1260	186*	152*	39-149	19	50				
Batch number: 103550007A	Sample number(s): 6164621-6164624, 6164626-6164643 UNSPK: 6164622								
Aldrin	88	97	16-126	10	50				
Alpha BHC	103	127	10-129	21	50				
Beta BHC	103	122	14-147	17	50				
Gamma BHC - Lindane	95	105	10-140	11	50				
p,p-DDD	103	135	16-163	27	50				
p,p-DDE	114	100	18-161	14	50				

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Quality Control Summary

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Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
p,p-DDT	113	166	10-176	38	50				
Delta BHC	119	84	23-140	34	50				
Dieldrin	91	111	19-154	20	50				
Endosulfan I	89	108	16-137	20	50				
Endosulfan II	92	113	28-154	20	50				
Endosulfan Sulfate	111	113	21-160	1	50				
Endrin	95	118	11-149	22	50				
Endrin Aldehyde	71	82	10-148	15	35				
Endrin Ketone	92	100	22-165	8	50				
Heptachlor	88	96	13-126	9	50				
Heptachlor Epoxide	94	113	13-157	19	50				
Methoxychlor	132	163*	32-147	21	50				
Batch number: 103511026003A Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622									
Antimony	68*	67*	75-125	2	20	0.149 J	0.140 J	6 (1)	20
Arsenic	167*	111	75-125	20	20	3.04	3.25	6	20
Beryllium	97	98	75-125	0	20	0.282	0.247	13 (1)	20
Cadmium	107	107	75-125	1	20	0.116	0.114	2 (1)	20
Chromium	118	110	75-125	5	20	8.10	8.21	1	20
Cobalt	89	92	75-125	2	20	3.61	3.69	2	20
Copper	111	100	75-125	7	20	5.45	5.21	4	20
Lead	110	113	75-125	1	20	5.62	5.76	3	20
Nickel	105	102	75-125	2	20	5.27	4.92	7	20
Silver	106	101	75-125	6	20	0.0148 J	0.0165 J	11 (1)	20
Thallium	99	110	75-125	8	20	0.0967 J	0.0894 J	8 (1)	20
Vanadium	134*	114	75-125	7	20	16.8	16.4	2	20
Zinc	112	91	75-125	6	20	25.2	24.4	3	20
Batch number: 103511026003B Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622									
Selenium	92	91	75-125	3	20	0.140 J	0.111 J	23* (1)	20
Batch number: 103511026003C Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622									
Molybdenum	105	104	75-125	2	20	0.297	0.321	8 (1)	20
Batch number: 103511026003D Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622									
Barium	152 (2)	96 (2)	75-125	10	20	46.1	49.3	7	20
Batch number: 103515708008 Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622									
Aluminum	1443 (2)	1911 (2)	75-125	9	20	7,430	6,570	12	20
Boron	95	98	84-115	4	20	5.67	4.92 J	14 (1)	20
Calcium	-1 (2)	211 (2)	75-125	35*	20	1,990	1,700	15	20
Iron	-985 (2)	-358 (2)	75-125	6	20	10,000	8,770	13	20
Lithium	98	100	82-114	3	20	7.3	5.6	25* (1)	20
Magnesium	14 (2)	97 (2)	75-125	9	20	1,770	1,360	26*	20
Manganese	60*	98	75-125	11	20	126	112	12	20
Phosphorus	97	89	75-125	2	20	260	229	13	20
Potassium	95	113	75-125	8	20	1,380	1,110	22*	20
Sodium	103	104	75-125	2	20	47.7 J	39.0 J	20 (1)	20
Strontium	99	99	75-115	1	20	24.0	23.7	1	20
Tin	96	96	80-110	1	20	2.07 J	1.85 J	11 (1)	20
Titanium	93	133*	75-125	8	20	387	301	25*	20

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Quality Control Summary

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Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>		<u>DUP Conc</u>		<u>DUP RPD</u>	<u>Dup RPD Max</u>
Zirconium	99	100	75-125	3	20	2.08	J	2.38	J	13 (1)	20
Batch number: 103515711004	Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622										
Mercury	96	95	65-135	3	20	0.0099	J	0.0088	J	11 (1)	20
Batch number: 10363243202A	Sample number(s): 6164621-6164623, 6164625-6164643 UNSPK: 6164622 BKG: 6164622										
3a Cr VI by EPA 7199	100		75-125			0.20	U	0.54	J	200* (1)	20
Batch number: 11001001202A	Sample number(s): 6164621-6164623, 6164625-6164633 UNSPK: 6164622 BKG: 6164622										
7a Perchlorate EPA 314.0	88		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11001001202B	Sample number(s): 6164634-6164643 UNSPK: 6164634 BKG: 6164634										
7a Perchlorate EPA 314.0	89		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11006006203A	Sample number(s): 6164621-6164623, 6164625-6164633 UNSPK: 6164622 BKG: 6164622										
11a Anions by 300.0 - Fluoride	100		80-120			0.80	U	1.3		200* (1)	20
Batch number: 11006006203B	Sample number(s): 6164634-6164643 UNSPK: 6164634 BKG: 6164634										
11a Anions by 300.0 - Fluoride	102		80-120			1.4		0.99	J	34* (1)	20
Batch number: 10350039401B	Sample number(s): 6164621-6164622, 6164625-6164627 BKG: 6164622										
22a pH by 9045C						8.38		8.39		0	1
Batch number: 10350039402A	Sample number(s): 6164628-6164636 BKG: 6164628										
22a pH by 9045C						8.20		8.28		1	1
Batch number: 10350039402B	Sample number(s): 6164637-6164643 BKG: P164946										
22a pH by 9045C						8.25		8.21		0	1
Batch number: 10350182101B	Sample number(s): 6164621-6164622, 6164625-6164627 BKG: 6164622										
Oxidation Reduction Potential						414		419		1	6
Batch number: 10350182102A	Sample number(s): 6164628-6164636 BKG: 6164628										
Oxidation Reduction Potential						402		398		1	6
Batch number: 10350182102B	Sample number(s): 6164637-6164643 BKG: P164946										
Oxidation Reduction Potential						426		428		1	6
Batch number: 10355162401A	Sample number(s): 6164621-6164634 BKG: 6164622										
28a Moisture Content by 160.3						4.1		4.0		1	20
28a Moisture Content by 160.3						4.1		4.0		1	20
28a Moisture Content by 160.3						4.1		4.0		1	20
Batch number: 10355162401B	Sample number(s): 6164635-6164643 BKG: 6164635										
28a Moisture Content by 160.3						6.2		6.0		3	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

Surrogate Quality Control

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10354SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164621	97	97	99	84	93	95
6164622	92	87	90	77	89	93
6164623	101	99	104	91	92	95
6164624	101	98	106	91	94	93
6164626	98	96	97	81	93	100
6164627	102	100	105	86	95	96
6164628	96	94	100	84	94	98
6164629	98	96	92	81	94	93
6164630	93	96	97	87	100	92
6164631	94	95	109	85	96	88
6164632	95	95	99	82	95	93
6164633	76	76	80	68	77	71
6164634	92	94	100	85	98	90
6164635	87	89	96	82	93	82
6164636	89	91	100	81	95	86
6164637	93	93	91	79	87	82
6164638	98	97	100	84	96	96
6164639	91	90	95	81	90	88
6164640	95	95	99	86	97	90
6164641	93	92	97	80	93	90
6164642	96	95	98	88	95	96
6164643	93	93	100	86	95	96
Blank	95	95	104	90	101	98
LCS	98	98	107	94	94	97
MS	101	99	104	91	92	95
MSD	101	98	106	91	94	93
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10354SLH026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164621	94	76	83
6164622	86	69	79
6164623	85	69	77
6164624	86	70	80
6164626	82	75	81
6164627	79	71	73
6164628	87	74	93
6164629	78	65	81
6164630	86	70	87
6164631	85	73	91
6164632	86	74	90
6164633	84	73	91
6164634	89	74	83
6164635	84	72	81
6164636	88	75	80
6164637	102	72	78
6164638	86	72	79
6164639	87	71	82
6164640	88	81	72
6164641	80	74	72

*- Outside of specification

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- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

Surrogate Quality Control

6164642	83	78	69
6164643	112	76	101
Blank	86	68	75
LCS	90	69	76
MS	85	69	77
MSD	86	70	80

Limits: 40-130 45-130 45-135

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 103540018A

Tetrachloro-m-xylene Decachlorobiphenyl

6164621	103	129*
6164622	115	137*
6164623	153*	161*
6164624	123	134*
6164626	129	126*
6164627	159*	173*
6164628	118	106
6164629	120	115
6164630	145*	137*
6164631	134	140*
6164632	123	113
6164633	159*	179*
6164634	70	128*
6164635	107	126*
6164636	119	125*
6164637	108	120
6164638	105	141*
6164639	106	114
6164640	107	79
6164641	134	97
6164642	137	97
6164643	134	116
Blank	121	144*
LCS	96	115
LCSD	101	131*
MS	154*	161*
MSD	123	134*

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 103550007A

Tetrachloro-m-xylene Decachlorobiphenyl

6164621	88	244*
6164622	80	162*
6164623	65	98
6164624	84	108
6164626	92	97
6164627	84	107
6164628	93	93
6164629	94	87
6164630	84	99
6164631	90	85
6164632	85	73

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:07 PM

Group Number: 1225470

Surrogate Quality Control

6164633	70	93
6164634	81	94
6164635	87	90
6164636	81	103
6164637	81	220*
6164638	82	137*
6164639	92	103
6164640	94	141*
6164641	74	0*
6164642	77	88
6164643	85	62
Blank	99	125*
LCS	101	133*
MS	65	98
MSD	85	108

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103560027A
2,4-Dichlorophenylacetic
acid

6164621	119
6164622	89
6164623	95
6164624	148
6164626	108
6164627	80
6164628	133
6164629	109
6164630	162*
6164631	115
6164632	105
6164633	118
6164634	81
6164635	74
6164636	114
6164637	110
6164638	174*
6164639	62
6164640	226*
6164641	86
6164642	113
6164643	53
Blank	113
LCS	123
MS	95
MSD	148

Limits: 36-156

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

13013 1225470 6164621-43

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING							Other Instructions and Notes																										
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP																																	
Samplers: (Signature)																																	
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers		VOC/EPA 8260B	1,4-Dioxane EPA 8260S/M	SVOCs EPA 8270C & PAHs 8270 S/M	TPH-GRO EPA 8015A	TPH-EH EPA 8015B Mod.	Metals EPA 8210/8220B/7412A	Hex Chrome EPA 7199*	Fluoride EPA 300.0	PCBs EPA 8062	Dioxin/Furan EPA 1631B	Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081a (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrate EPA 300.0	**Formaldehyde EPA 8151A	**HDMMA EPA 8125C	**Emergent EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycol EPA 8015B	**Alcohols EPA 8015B				
SL-002-SASB-SB-4.0-5.0	12.14.10	0942	soil	none	3 x 4 oz. jars & 3 16 oz. jars		X		X	X	X	X	X	X	X	X	X																
SL-002-SASB-SB-9.0-10.0	12.14.10	0950	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X		X	X	X	X	X	X	X																	
TB-121410	12.14.10	0800	water	HCl	2-40 mL VOA vials		X	X	X																							trip blank	
EB02-SASB-121410	12.14.10	1230	water	none	6-1 liter ambers			X										X	X													rinse	
EB02-SASB-121410	12.14.10	1230	water	none	1-500 ml poly								X	X			X															rinse	
EB02-SASB-121410	12.14.10	1230	water	HNO3	1-500 ml poly						X																					rinse	
EB02-SASB-121410	12.14.10	1230	water	HCl	6-40 mL amber VOA vials		X	X	X																							rinse	
SL-002-SASB-SB-9.5	12.14.10	0948	soil	none	5 Encore Samplers		X	X	X																								
SL-002-SASB-SB-4.5	12.14.10	0938	soil	none	5 Encore Samplers		X	X	X																								
SL-004-SASB-SB-4.5	12.14.10	1104	soil	none	5 Encore Samplers		X	X	X																								
SL-004-SASB-SB-9.5	12.14.10	1115	soil	none	5 Encore Samplers		X	X	X																								
SL-004-SASB-SB-9.0-10.0	12.14.10	1118	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X		
SL-004-SASB-SB-4.0-5.0	12.14.10	1111	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X		
SL-140-SASB-SB-3.0-4.0	12.14.10	1428	soil	none	2 x 16 oz. jars			X		X	X	X	X	X	X	X																	
SL-140-SASB-SB-3.5	12.14.10	1425	soil	none	5 Encore Samplers		X	X			X	X	X	X	X	X																	
DUP05-SASB-SB-121410	12.14.10	0850	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													DUP
SL-120-SASB-SS-0.0-0.5MS	12.14.10	0847	soil	none	2 x 16 oz. jars & 2 16" sleeves			X		X	X	X	X	X	X	X			X	X													MS/MSD
SL-108-SASB-SS-0.0-0.5	12.14.10	0855	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-118-SASB-SS-0.0-0.5	12.14.10	0830	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-240-SASB-SS-0.0-0.5	12.14.10	0933	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-109-SASB-SS-0.0-0.5	12.14.10	0909	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-122-SASB-SS-0.0-0.5	12.14.10	0940	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-121-SASB-SS-0.0-0.5	12.14.10	0915	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-054-SASB-SS-0.0-0.5	12.14.10	0921	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-105-SASB-SS-0.0-0.5	12.14.10	0835	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-098-SASB-SS-0.0-0.5	12.14.10	1043	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-142-SASB-SS-0.0-0.5	12.14.10	1194	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-143-SASB-SS-0.0-0.5	12.14.10	1115	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-123-SASB-SS-0.0-0.5	12.14.10	1040	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-124-SASB-SS-0.0-0.5	12.14.10	1100	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-309-SASB-SS-0.0-0.5	12.14.10	1325	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-311-SASB-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-310-SASB-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-312-SASB-SS-0.0-0.5	12.14.10	1427	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SED-025-SIV-SD-0.0-0.5	12.14.10	1244	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SED-024-SIV-SD-0.0-0.5	12.14.10	1116	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SED-023-SIV-SD-0.0-0.5	12.14.10	0919	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SED-022-SIV-SD-0.0-0.5	12.14.10	1008	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-125-SASB-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-126-SASB-SS-0.0-0.5	12.14.10	1420	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-129-SASB-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-128-SASB-SS-0.0-0.5	12.14.10	1335	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SED-027-SIV-SD-0.0-0.5	12.14.10	1559	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SED-026-SIV-SD-0.0-0.5	12.14.10	1522	soil	none	1 x 16 oz. jar & 1 16" sleeve			X		X	X	X	X	X	X	X			X	X													
SL-060-SASB-SB-10.0-11.0	12.14.10	1618	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	
SL-060-SASB-SB-10.5	12.14.10	1614	soil	none	5 Encore Samplers		X	X	X																								
Relinquished by: (Signature)						Date/Time		Received for Laboratory by: (Signature)		Date/Time																							
						12.14.10 1700				12/15/10 0946																							
Received by: (Signature)						Date/Time		Airbill No.																									
								00732992																									
								Tracking Number 869514317156																									
										Laboratory: Lancaster Laboratories, Inc.																							
										No. of coolers = 5																							

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

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February 02, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/15/2010

Group Number: 1225471

SDG: DX022

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample Description

DUP05-SA5B-QC-121410 Grab Soil
SL-120-SA5B-SS-0.0-0.5 Grab Soil
SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SL-108-SA5B-SS-0.0-0.5 Grab Soil
SL-119-SA5B-SS-0.0-0.5 Grab Soil
SL-240-SA5B-SS-0.0-0.5 Grab Soil
SL-109-SA5B-SS-0.0-0.5 Grab Soil
SL-122-SA5B-SS-0.0-0.5 Grab Soil
SL-121-SA5B-SS-0.0-0.5 Grab Soil
SL-054-SA5B-SS-0.0-0.5 Grab Soil
SL-105-SA5B-SS-0.0-0.5 Grab Soil
SL-098-SA5B-SS-0.0-0.5 Grab Soil
SL-142-SA5B-SS-0.0-0.5 Grab Soil
SL-143-SA5B-SS-0.0-0.5 Grab Soil
SL-123-SA5B-SS-0.0-0.5 Grab Soil
SL-124-SA5B-SS-0.0-0.5 Grab Soil
SL-309-SA5B-SS-0.0-0.5 Grab Soil
SL-311-SA5B-SS-0.0-0.5 Grab Soil
SL-310-SA5B-SS-0.0-0.5 Grab Soil
SL-312-SA5B-SS-0.0-0.5 Grab Soil
SED-025-SIV-SD-0.0-0.5 Grab Soil

Lancaster Labs (LLI) #

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The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.



Analysis Report

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ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Charles J. Neslund'.

Charles J. Neslund
Manager



Analysis Report

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Page 1 of 4

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164644
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

DDP05 SDG#: DX022-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	3.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164644
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

DDP05 SDG#: DX022-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0203 U	0.0203	1.04	1
11031	12378-PeCDD	40321-76-4	0.138 JBQ	0.0322	5.18	1
11031	123478-HxCDD	39227-28-6	0.228 JB	0.0327	5.18	1
11031	123678-HxCDD	57653-85-7	0.572 JB	0.0343	5.18	1
11031	123789-HxCDD	19408-74-3	0.535 JB	0.0357	5.18	1
11031	1234678-HpCDD	35822-46-9	16.7 B	0.0535	5.18	1
11031	OCDD	3268-87-9	172 B	0.0519	10.4	1
11031	2378-TCDF	51207-31-9	0.0808 JB	0.0242	1.04	1
11031	12378-PeCDF	57117-41-6	0.134 JB	0.0161	5.18	1
11031	23478-PeCDF	57117-31-4	0.300 JBQ	0.0159	5.18	1
11031	123478-HxCDF	70648-26-9	0.356 JBQ	0.0248	5.18	1
11031	123678-HxCDF	57117-44-9	0.286 JB	0.0238	5.18	1
11031	123789-HxCDF	72918-21-9	0.230 JB	0.0297	5.18	1
11031	234678-HxCDF	60851-34-5	0.541 JBQ	0.0242	5.18	1
11031	1234678-HpCDF	67562-39-4	4.47 JB	0.0222	5.18	1
11031	1234789-HpCDF	55673-89-7	0.410 JB	0.0322	5.18	1
11031	OCDF	39001-02-0	10.3 JB	0.0392	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	70	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164644
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

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14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

DDP05 SDG#: DX022-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164644
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

DDP05 SDG#: DX022-01FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/17/2011 23:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164645
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164645
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0355 JBQ	0.0191	1.04	1
11031	12378-PeCDD	40321-76-4	0.101 JBQ	0.0297	5.21	1
11031	123478-HxCDD	39227-28-6	0.237 JB	0.0350	5.21	1
11031	123678-HxCDD	57653-85-7	0.657 JB	0.0367	5.21	1
11031	123789-HxCDD	19408-74-3	0.523 JB	0.0344	5.21	1
11031	1234678-HpCDD	35822-46-9	18.5 B	0.0677	5.21	1
11031	OCDD	3268-87-9	199 B	0.0527	10.4	1
11031	2378-TCDF	51207-31-9	0.121 JB	0.0224	1.04	1
11031	12378-PeCDF	57117-41-6	0.138 JB	0.0142	5.21	1
11031	23478-PeCDF	57117-31-4	0.265 JB	0.0142	5.21	1
11031	123478-HxCDF	70648-26-9	0.316 JB	0.0261	5.21	1
11031	123678-HxCDF	57117-44-9	0.327 JB	0.0229	5.21	1
11031	123789-HxCDF	72918-21-9	0.231 JB	0.0307	5.21	1
11031	234678-HxCDF	60851-34-5	0.483 JB	0.0255	5.21	1
11031	1234678-HpCDF	67562-39-4	4.62 JB	0.0204	5.21	1
11031	1234789-HpCDF	55673-89-7	0.470 JB	0.0350	5.21	1
11031	OCDF	39001-02-0	11.5 B	0.0335	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164645
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
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Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164645
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
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Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 00:16	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164646
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164646
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.6	B	0.0227	1
11031	12378-PeCDD	40321-76-4	113	B	0.0381	1
11031	123478-HxCDD	39227-28-6	116	B	0.0393	1
11031	123678-HxCDD	57653-85-7	114	B	0.0408	1
11031	123789-HxCDD	19408-74-3	115	B	0.0405	1
11031	1234678-HpCDD	35822-46-9	133	B	0.0728	1
11031	OCDD	3268-87-9	436	B	0.0685	10.4
11031	2378-TCDF	51207-31-9	22.7	B	0.0324	1
11031	12378-PeCDF	57117-41-6	113	B	0.0213	1
11031	23478-PeCDF	57117-31-4	112	B	0.0210	1
11031	123478-HxCDF	70648-26-9	108	B	0.0422	1
11031	123678-HxCDF	57117-44-9	107	B	0.0396	1
11031	123789-HxCDF	72918-21-9	110	B	0.0470	1
11031	234678-HxCDF	60851-34-5	109	B	0.0400	1
11031	1234678-HpCDF	67562-39-4	114	B	0.0449	1
11031	1234789-HpCDF	55673-89-7	109	B	0.0569	1
11031	OCDF	39001-02-0	237	B	0.0453	10.4

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164646
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164646
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 01:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164647
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164647
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.6	B	0.0286	1
11031	12378-PeCDD	40321-76-4	112	B	0.0523	1
11031	123478-HxCDD	39227-28-6	115	B	0.0472	1
11031	123678-HxCDD	57653-85-7	113	B	0.0482	1
11031	123789-HxCDD	19408-74-3	114	B	0.0498	1
11031	1234678-HpCDD	35822-46-9	130	B	0.0924	1
11031	OCDD	3268-87-9	391	B	0.0794	1
11031	2378-TCDF	51207-31-9	23.4	B	0.0348	1
11031	12378-PeCDF	57117-41-6	114	B	0.0222	1
11031	23478-PeCDF	57117-31-4	114	B	0.0221	1
11031	123478-HxCDF	70648-26-9	109	B	0.0483	1
11031	123678-HxCDF	57117-44-9	109	B	0.0448	1
11031	123789-HxCDF	72918-21-9	110	B	0.0596	1
11031	234678-HxCDF	60851-34-5	110	B	0.0475	1
11031	1234678-HpCDF	67562-39-4	114	B	0.0543	1
11031	1234789-HpCDF	55673-89-7	110	B	0.0812	1
11031	OCDF	39001-02-0	230	B	0.0566	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	63	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164647
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-120 SDG#: DX022-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164647
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-120 SDG#: DX022-02MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 02:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164648
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-108 SDG#: DX022-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164648
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-108 SDG#: DX022-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0648	JB	0.0247	1
11031	12378-PeCDD	40321-76-4	0.343	JBQ	0.0435	1
11031	123478-HxCDD	39227-28-6	0.722	JB	0.0343	1
11031	123678-HxCDD	57653-85-7	3.51	JB	0.0348	1
11031	123789-HxCDD	19408-74-3	1.50	JB	0.0369	1
11031	1234678-HpCDD	35822-46-9	104	B	0.136	1
11031	OCDD	3268-87-9	1,070	B	0.0865	1
11031	2378-TCDF	51207-31-9	0.113	JBQ	0.0315	1
11031	12378-PeCDF	57117-41-6	0.542	JB	0.0172	1
11031	23478-PeCDF	57117-31-4	0.502	JB	0.0167	1
11031	123478-HxCDF	70648-26-9	0.526	JB	0.0303	1
11031	123678-HxCDF	57117-44-9	0.641	JB	0.0280	1
11031	123789-HxCDF	72918-21-9	0.431	JB	0.0356	1
11031	234678-HxCDF	60851-34-5	1.02	JB	0.0295	1
11031	1234678-HpCDF	67562-39-4	11.2	B	0.0287	1
11031	1234789-HpCDF	55673-89-7	1.13	JB	0.0446	1
11031	OCDF	39001-02-0	26.2	B	0.0371	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164648
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-108 SDG#: DX022-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					



Analysis Report

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Page 4 of 4

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164648
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-108 SDG#: DX022-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 03:05	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164649
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-119 SDG#: DX022-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	7.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164649
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-119 SDG#: DX022-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0212 U	0.0212	1.08	1
11031	12378-PeCDD	40321-76-4	0.213 JBQ	0.0416	5.41	1
11031	123478-HxCDD	39227-28-6	0.310 JBQ	0.0346	5.41	1
11031	123678-HxCDD	57653-85-7	0.914 JB	0.0357	5.41	1
11031	123789-HxCDD	19408-74-3	0.972 JB	0.0363	5.41	1
11031	1234678-HpCDD	35822-46-9	23.8 B	0.0657	5.41	1
11031	OCDD	3268-87-9	278 B	0.0617	10.8	1
11031	2378-TCDF	51207-31-9	0.0754 JBQ	0.0316	1.08	1
11031	12378-PeCDF	57117-41-6	0.219 JBQ	0.0186	5.41	1
11031	23478-PeCDF	57117-31-4	0.302 JBQ	0.0187	5.41	1
11031	123478-HxCDF	70648-26-9	0.337 JB	0.0325	5.41	1
11031	123678-HxCDF	57117-44-9	0.438 JB	0.0285	5.41	1
11031	123789-HxCDF	72918-21-9	0.485 JBQ	0.0380	5.41	1
11031	234678-HxCDF	60851-34-5	0.610 JBQ	0.0305	5.41	1
11031	1234678-HpCDF	67562-39-4	6.00 B	0.0233	5.41	1
11031	1234789-HpCDF	55673-89-7	0.549 JBQ	0.0379	5.41	1
11031	OCDF	39001-02-0	15.6 B	0.0367	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	63	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164649
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-119 SDG#: DX022-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164649
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-119 SDG#: DX022-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 04:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164650
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-240 SDG#: DX022-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164650
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-240 SDG#: DX022-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0375 U	0.0375	1.04	1
11031	12378-PeCDD	40321-76-4	0.546 JBQ	0.0842	5.21	1
11031	123478-HxCDD	39227-28-6	1.08 JB	0.0529	5.21	1
11031	123678-HxCDD	57653-85-7	3.93 JB	0.0531	5.21	1
11031	123789-HxCDD	19408-74-3	1.48 JB	0.0520	5.21	1
11031	1234678-HpCDD	35822-46-9	92.3 B	0.152	5.21	1
11031	OCDD	3268-87-9	972 B	0.125	10.4	1
11031	2378-TCDF	51207-31-9	0.130 JB	0.0486	1.04	1
11031	12378-PeCDF	57117-41-6	0.327 JB	0.0294	5.21	1
11031	23478-PeCDF	57117-31-4	0.539 JB	0.0284	5.21	1
11031	123478-HxCDF	70648-26-9	0.602 JB	0.0450	5.21	1
11031	123678-HxCDF	57117-44-9	0.656 JB	0.0415	5.21	1
11031	123789-HxCDF	72918-21-9	0.298 JBQ	0.0510	5.21	1
11031	234678-HxCDF	60851-34-5	0.932 JBQ	0.0448	5.21	1
11031	1234678-HpCDF	67562-39-4	10.2 B	0.0386	5.21	1
11031	1234789-HpCDF	55673-89-7	0.907 JB	0.0540	5.21	1
11031	OCDF	39001-02-0	21.7 B	0.0549	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	61	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164650
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-240 SDG#: DX022-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164650
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-240 SDG#: DX022-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 04:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164651
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-109 SDG#: DX022-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164651
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-109 SDG#: DX022-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0406 JBQ	0.0221	1.06	1
11031	12378-PeCDD	40321-76-4	0.245 JB	0.0408	5.31	1
11031	123478-HxCDD	39227-28-6	0.553 JB	0.0497	5.31	1
11031	123678-HxCDD	57653-85-7	2.38 JB	0.0518	5.31	1
11031	123789-HxCDD	19408-74-3	0.967 JB	0.0486	5.31	1
11031	1234678-HpCDD	35822-46-9	65.3 B	0.0994	5.31	1
11031	OCDD	3268-87-9	689 B	0.0790	10.6	1
11031	2378-TCDF	51207-31-9	0.0866 JB	0.0224	1.06	1
11031	12378-PeCDF	57117-41-6	0.247 JB	0.0134	5.31	1
11031	23478-PeCDF	57117-31-4	0.376 JB	0.0138	5.31	1
11031	123478-HxCDF	70648-26-9	0.435 JB	0.0296	5.31	1
11031	123678-HxCDF	57117-44-9	0.461 JB	0.0258	5.31	1
11031	123789-HxCDF	72918-21-9	0.314 JBQ	0.0323	5.31	1
11031	234678-HxCDF	60851-34-5	0.772 JBQ	0.0285	5.31	1
11031	1234678-HpCDF	67562-39-4	7.18 B	0.0287	5.31	1
11031	1234789-HpCDF	55673-89-7	0.812 JBQ	0.0448	5.31	1
11031	OCDF	39001-02-0	16.0 B	0.0493	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164651
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-109 SDG#: DX022-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164651
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-109 SDG#: DX022-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 08:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164652
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-122 SDG#: DX022-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164652
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-122 SDG#: DX022-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0224 JBQ	0.0164	1.06	1
11031	12378-PeCDD	40321-76-4	0.121 JBQ	0.0324	5.29	1
11031	123478-HxCDD	39227-28-6	0.0834 JBQ	0.0331	5.29	1
11031	123678-HxCDD	57653-85-7	0.422 JBQ	0.0341	5.29	1
11031	123789-HxCDD	19408-74-3	0.741 JB	0.0341	5.29	1
11031	1234678-HpCDD	35822-46-9	2.25 JB	0.0417	5.29	1
11031	OCDD	3268-87-9	22.4 B	0.0395	10.6	1
11031	2378-TCDF	51207-31-9	0.0494 JB	0.0270	1.06	1
11031	12378-PeCDF	57117-41-6	0.344 JBQ	0.0137	5.29	1
11031	23478-PeCDF	57117-31-4	0.255 JB	0.0133	5.29	1
11031	123478-HxCDF	70648-26-9	0.217 JB	0.0259	5.29	1
11031	123678-HxCDF	57117-44-9	0.209 JB	0.0230	5.29	1
11031	123789-HxCDF	72918-21-9	0.527 JBQ	0.0288	5.29	1
11031	234678-HxCDF	60851-34-5	0.278 JB	0.0248	5.29	1
11031	1234678-HpCDF	67562-39-4	1.17 JB	0.0196	5.29	1
11031	1234789-HpCDF	55673-89-7	0.205 JB	0.0312	5.29	1
11031	OCDF	39001-02-0	1.61 JB	0.0406	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164652
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-122 SDG#: DX022-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164652
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-122 SDG#: DX022-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 09:54	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164653
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-121 SDG#: DX022-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164653
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-121 SDG#: DX022-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0222 JBQ	0.0171	1.06	1
11031	12378-PeCDD	40321-76-4	0.0304 U	0.0304	5.30	1
11031	123478-HxCDD	39227-28-6	0.0306 U	0.0306	5.30	1
11031	123678-HxCDD	57653-85-7	0.314 JBQ	0.0321	5.30	1
11031	123789-HxCDD	19408-74-3	0.438 JB	0.0315	5.30	1
11031	1234678-HpCDD	35822-46-9	2.20 JB	0.0480	5.30	1
11031	OCDD	3268-87-9	26.8 B	0.0446	10.6	1
11031	2378-TCDF	51207-31-9	0.0330 U	0.0330	1.06	1
11031	12378-PeCDF	57117-41-6	0.701 JBQ	0.0137	5.30	1
11031	23478-PeCDF	57117-31-4	0.201 JBQ	0.0151	5.30	1
11031	123478-HxCDF	70648-26-9	0.181 JBQ	0.0266	5.30	1
11031	123678-HxCDF	57117-44-9	0.176 JB	0.0214	5.30	1
11031	123789-HxCDF	72918-21-9	0.330 JB	0.0316	5.30	1
11031	234678-HxCDF	60851-34-5	0.160 JB	0.0255	5.30	1
11031	1234678-HpCDF	67562-39-4	0.826 JB	0.0178	5.30	1
11031	1234789-HpCDF	55673-89-7	0.124 JBQ	0.0334	5.30	1
11031	OCDF	39001-02-0	1.64 JB	0.0456	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164653
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-121 SDG#: DX022-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164653
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-121 SDG#: DX022-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 10:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164654
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-054 SDG#: DX022-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164654
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-054 SDG#: DX022-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0735	JBQ 0.0319	1.07	1
11031	12378-PeCDD	40321-76-4	0.435	JBQ 0.0639	5.33	1
11031	123478-HxCDD	39227-28-6	1.08	JBQ 0.0449	5.33	1
11031	123678-HxCDD	57653-85-7	4.69	JB 0.0465	5.33	1
11031	123789-HxCDD	19408-74-3	1.98	JB 0.0447	5.33	1
11031	1234678-HpCDD	35822-46-9	143	B 0.148	5.33	1
11031	OCDD	3268-87-9	1,600	B 0.120	10.7	1
11031	2378-TCDF	51207-31-9	0.0546	JB 0.0353	1.07	1
11031	12378-PeCDF	57117-41-6	0.330	JB 0.0191	5.33	1
11031	23478-PeCDF	57117-31-4	0.367	JB 0.0179	5.33	1
11031	123478-HxCDF	70648-26-9	0.505	JBQ 0.0362	5.33	1
11031	123678-HxCDF	57117-44-9	0.642	JB 0.0332	5.33	1
11031	123789-HxCDF	72918-21-9	0.274	JB 0.0391	5.33	1
11031	234678-HxCDF	60851-34-5	0.856	JB 0.0353	5.33	1
11031	1234678-HpCDF	67562-39-4	13.7	B 0.0308	5.33	1
11031	1234789-HpCDF	55673-89-7	1.32	JB 0.0465	5.33	1
11031	OCDF	39001-02-0	38.0	B 0.0474	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164654
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-054 SDG#: DX022-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164654
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-054 SDG#: DX022-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 11:47	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164655
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-105 SDG#: DX022-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164655
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-105 SDG#: DX022-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0295	U	0.0295	1
11031	12378-PeCDD	40321-76-4	0.412	JBQ	0.0712	1
11031	123478-HxCDD	39227-28-6	0.795	JB	0.0452	1
11031	123678-HxCDD	57653-85-7	4.14	JB	0.0474	1
11031	123789-HxCDD	19408-74-3	1.63	JBQ	0.0444	1
11031	1234678-HpCDD	35822-46-9	114	B	0.111	1
11031	OCDD	3268-87-9	1,230	B	0.110	1
11031	2378-TCDF	51207-31-9	0.0802	JBQ	0.0366	1
11031	12378-PeCDF	57117-41-6	0.424	JB	0.0211	1
11031	23478-PeCDF	57117-31-4	0.148	JBQ	0.0206	1
11031	123478-HxCDF	70648-26-9	0.400	JB	0.0350	1
11031	123678-HxCDF	57117-44-9	0.588	JB	0.0310	1
11031	123789-HxCDF	72918-21-9	0.282	JB	0.0376	1
11031	234678-HxCDF	60851-34-5	0.755	JB	0.0338	1
11031	1234678-HpCDF	67562-39-4	12.0	B	0.0326	1
11031	1234789-HpCDF	55673-89-7	1.15	JB	0.0461	1
11031	OCDF	39001-02-0	29.3	B	0.0493	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	66	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164655
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-105 SDG#: DX022-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164655
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-105 SDG#: DX022-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 12:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164656
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-098 SDG#: DX022-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	3.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164656
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-098 SDG#: DX022-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0639 JBQ	0.0230	1.03	1
11031	12378-PeCDD	40321-76-4	0.214 JBQ	0.0469	5.17	1
11031	123478-HxCDD	39227-28-6	0.364 JB	0.0274	5.17	1
11031	123678-HxCDD	57653-85-7	2.00 JB	0.0288	5.17	1
11031	123789-HxCDD	19408-74-3	0.922 JB	0.0282	5.17	1
11031	1234678-HpCDD	35822-46-9	60.4 B	0.0733	5.17	1
11031	OCDD	3268-87-9	598 B	0.0793	10.3	1
11031	2378-TCDF	51207-31-9	0.0287 U	0.0287	1.03	1
11031	12378-PeCDF	57117-41-6	0.287 JBQ	0.0150	5.17	1
11031	23478-PeCDF	57117-31-4	0.147 JB	0.0150	5.17	1
11031	123478-HxCDF	70648-26-9	0.239 JB	0.0199	5.17	1
11031	123678-HxCDF	57117-44-9	0.305 JB	0.0177	5.17	1
11031	123789-HxCDF	72918-21-9	0.151 JB	0.0236	5.17	1
11031	234678-HxCDF	60851-34-5	0.421 JBQ	0.0192	5.17	1
11031	1234678-HpCDF	67562-39-4	5.52 B	0.0222	5.17	1
11031	1234789-HpCDF	55673-89-7	0.578 JB	0.0347	5.17	1
11031	OCDF	39001-02-0	12.9 B	0.0389	10.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164656
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-098 SDG#: DX022-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164656
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-098 SDG#: DX022-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 13:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164657
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-142 SDG#: DX022-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164657
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-142 SDG#: DX022-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0267 JBQ	0.0214	1.07	1
11031	12378-PeCDD	40321-76-4	0.0512 JBQ	0.0297	5.33	1
11031	123478-HxCDD	39227-28-6	0.0550 JBQ	0.0253	5.33	1
11031	123678-HxCDD	57653-85-7	0.117 JB	0.0264	5.33	1
11031	123789-HxCDD	19408-74-3	0.0982 JB	0.0260	5.33	1
11031	1234678-HpCDD	35822-46-9	3.01 JB	0.0383	5.33	1
11031	OCDD	3268-87-9	31.3 B	0.0432	10.7	1
11031	2378-TCDF	51207-31-9	0.0183 U	0.0183	1.07	1
11031	12378-PeCDF	57117-41-6	0.185 JBQ	0.0107	5.33	1
11031	23478-PeCDF	57117-31-4	0.0547 JBQ	0.0116	5.33	1
11031	123478-HxCDF	70648-26-9	0.0920 JBQ	0.0216	5.33	1
11031	123678-HxCDF	57117-44-9	0.0568 JBQ	0.0176	5.33	1
11031	123789-HxCDF	72918-21-9	0.0673 JB	0.0275	5.33	1
11031	234678-HxCDF	60851-34-5	0.0798 JB	0.0201	5.33	1
11031	1234678-HpCDF	67562-39-4	0.707 JB	0.0156	5.33	1
11031	1234789-HpCDF	55673-89-7	0.103 JB	0.0349	5.33	1
11031	OCDF	39001-02-0	1.67 JBQ	0.0502	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	41	17 - 157
13C12-1278-TCDD (CRS)	72	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164657
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-142 SDG#: DX022-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164657
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-142 SDG#: DX022-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 14:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164658
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-143 SDG#: DX022-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	3.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164658
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-143 SDG#: DX022-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0197 U	0.0197	1.04	1
11031	12378-PeCDD	40321-76-4	0.0773 JBQ	0.0292	5.19	1
11031	123478-HxCDD	39227-28-6	0.0525 JBQ	0.0273	5.19	1
11031	123678-HxCDD	57653-85-7	0.214 JBQ	0.0281	5.19	1
11031	123789-HxCDD	19408-74-3	0.324 JB	0.0271	5.19	1
11031	1234678-HpCDD	35822-46-9	3.24 JB	0.0371	5.19	1
11031	OCDD	3268-87-9	29.2 B	0.0445	10.4	1
11031	2378-TCDF	51207-31-9	0.0190 U	0.0190	1.04	1
11031	12378-PeCDF	57117-41-6	0.0737 JBQ	0.0101	5.19	1
11031	23478-PeCDF	57117-31-4	0.0574 JBQ	0.0104	5.19	1
11031	123478-HxCDF	70648-26-9	0.0609 JBQ	0.0189	5.19	1
11031	123678-HxCDF	57117-44-9	0.0503 JBQ	0.0155	5.19	1
11031	123789-HxCDF	72918-21-9	0.201 JB	0.0232	5.19	1
11031	234678-HxCDF	60851-34-5	0.0658 JB	0.0187	5.19	1
11031	1234678-HpCDF	67562-39-4	0.645 JB	0.0135	5.19	1
11031	1234789-HpCDF	55673-89-7	0.0660 JBQ	0.0294	5.19	1
11031	OCDF	39001-02-0	1.39 JB	0.0402	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	49	17 - 157
13C12-1278-TCDD (CRS)	72	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164658
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-143 SDG#: DX022-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164658
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-143 SDG#: DX022-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 15:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164659
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-123 SDG#: DX022-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164659
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-123 SDG#: DX022-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.159	JB 0.0233	1.06	1
11031	12378-PeCDD	40321-76-4	1.07	JB 0.0597	5.32	1
11031	123478-HxCDD	39227-28-6	2.46	JB 0.0419	5.32	1
11031	123678-HxCDD	57653-85-7	6.79	B 0.0432	5.32	1
11031	123789-HxCDD	19408-74-3	4.83	JB 0.0430	5.32	1
11031	1234678-HpCDD	35822-46-9	201	B 0.147	5.32	1
11031	OCDD	3268-87-9	1,920	B 0.0904	10.6	1
11031	2378-TCDF	51207-31-9	1.29	B 0.0858	1.06	1
11031	12378-PeCDF	57117-41-6	1.00	JB 0.0278	5.32	1
11031	23478-PeCDF	57117-31-4	2.23	JB 0.0282	5.32	1
11031	123478-HxCDF	70648-26-9	1.70	JB 0.0367	5.32	1
11031	123678-HxCDF	57117-44-9	1.84	JB 0.0322	5.32	1
11031	123789-HxCDF	72918-21-9	0.647	JB 0.0424	5.32	1
11031	234678-HxCDF	60851-34-5	2.16	JB 0.0357	5.32	1
11031	1234678-HpCDF	67562-39-4	37.2	B 0.0370	5.32	1
11031	1234789-HpCDF	55673-89-7	2.94	JB 0.0639	5.32	1
11031	OCDF	39001-02-0	114	B 0.0383	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	54	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164659
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-123 SDG#: DX022-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164659
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-123 SDG#: DX022-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 16:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164660
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-124 SDG#: DX022-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164660
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-124 SDG#: DX022-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0882	JBQ 0.0194	1.05	1
11031	12378-PeCDD	40321-76-4	0.542	JB 0.0496	5.27	1
11031	123478-HxCDD	39227-28-6	1.06	JB 0.0285	5.27	1
11031	123678-HxCDD	57653-85-7	2.93	JB 0.0295	5.27	1
11031	123789-HxCDD	19408-74-3	2.43	JB 0.0293	5.27	1
11031	1234678-HpCDD	35822-46-9	93.4	B 0.0926	5.27	1
11031	OCDD	3268-87-9	1,120	B 0.0810	10.5	1
11031	2378-TCDF	51207-31-9	0.373	JBQ 0.0449	1.05	1
11031	12378-PeCDF	57117-41-6	0.841	JB 0.0201	5.27	1
11031	23478-PeCDF	57117-31-4	0.831	JBQ 0.0195	5.27	1
11031	123478-HxCDF	70648-26-9	0.862	JB 0.0261	5.27	1
11031	123678-HxCDF	57117-44-9	0.759	JB 0.0238	5.27	1
11031	123789-HxCDF	72918-21-9	0.773	JBQ 0.0300	5.27	1
11031	234678-HxCDF	60851-34-5	0.840	JB 0.0255	5.27	1
11031	1234678-HpCDF	67562-39-4	14.3	B 0.0249	5.27	1
11031	1234789-HpCDF	55673-89-7	1.05	JB 0.0360	5.27	1
11031	OCDF	39001-02-0	34.2	B 0.0252	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	69	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164660
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-124 SDG#: DX022-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164660
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-124 SDG#: DX022-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 17:26	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164661
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-309 SDG#: DX022-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164661
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-309 SDG#: DX022-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0594 JBQ	0.0131	1.04	1
11031	12378-PeCDD	40321-76-4	0.324 JB	0.0285	5.21	1
11031	123478-HxCDD	39227-28-6	0.585 JBQ	0.0242	5.21	1
11031	123678-HxCDD	57653-85-7	1.50 JB	0.0246	5.21	1
11031	123789-HxCDD	19408-74-3	1.11 JB	0.0241	5.21	1
11031	1234678-HpCDD	35822-46-9	50.0 B	0.0672	5.21	1
11031	OCDD	3268-87-9	626 B	0.0503	10.4	1
11031	2378-TCDF	51207-31-9	0.0495 JB	0.0193	1.04	1
11031	12378-PeCDF	57117-41-6	0.222 JB	0.0126	5.21	1
11031	23478-PeCDF	57117-31-4	0.253 JB	0.0122	5.21	1
11031	123478-HxCDF	70648-26-9	0.701 JB	0.0215	5.21	1
11031	123678-HxCDF	57117-44-9	0.470 JBQ	0.0194	5.21	1
11031	123789-HxCDF	72918-21-9	0.279 JB	0.0222	5.21	1
11031	234678-HxCDF	60851-34-5	0.546 JB	0.0206	5.21	1
11031	1234678-HpCDF	67562-39-4	7.73 B	0.0188	5.21	1
11031	1234789-HpCDF	55673-89-7	0.814 JB	0.0231	5.21	1
11031	OCDF	39001-02-0	15.1 B	0.0195	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164661
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-309 SDG#: DX022-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164661
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-309 SDG#: DX022-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 21:26	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164662
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-311 SDG#: DX022-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	7.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164662
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-311 SDG#: DX022-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.331	JB 0.0229	1.08	1
11031	12378-PeCDD	40321-76-4	2.91	JB 0.0556	5.42	1
11031	123478-HxCDD	39227-28-6	5.93	B 0.0495	5.42	1
11031	123678-HxCDD	57653-85-7	12.9	B 0.0509	5.42	1
11031	123789-HxCDD	19408-74-3	11.7	B 0.0499	5.42	1
11031	1234678-HpCDD	35822-46-9	415	B 0.162	5.42	1
11031	OCDD	3268-87-9	5,310	EB 0.140	10.8	1
11031	2378-TCDF	51207-31-9	0.279	JB 0.0348	1.08	1
11031	12378-PeCDF	57117-41-6	0.615	JB 0.0180	5.42	1
11031	23478-PeCDF	57117-31-4	1.00	JB 0.0164	5.42	1
11031	123478-HxCDF	70648-26-9	3.73	JB 0.0339	5.42	1
11031	123678-HxCDF	57117-44-9	3.22	JB 0.0326	5.42	1
11031	123789-HxCDF	72918-21-9	1.29	JB 0.0356	5.42	1
11031	234678-HxCDF	60851-34-5	4.52	JB 0.0338	5.42	1
11031	1234678-HpCDF	67562-39-4	67.1	B 0.0398	5.42	1
11031	1234789-HpCDF	55673-89-7	5.74	B 0.0492	5.42	1
11031	OCDF	39001-02-0	147	B 0.0433	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	66	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164662
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-311 SDG#: DX022-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164662
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-311 SDG#: DX022-17

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 22:22	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164663
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-310 SDG#: DX022-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164663
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-310 SDG#: DX022-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0262 JBQ	0.0218	1.05	1
11031	12378-PeCDD	40321-76-4	0.158 JBQ	0.0492	5.27	1
11031	123478-HxCDD	39227-28-6	0.317 JBQ	0.0403	5.27	1
11031	123678-HxCDD	57653-85-7	1.07 JB	0.0427	5.27	1
11031	123789-HxCDD	19408-74-3	0.759 JB	0.0432	5.27	1
11031	1234678-HpCDD	35822-46-9	31.5 B	0.0829	5.27	1
11031	OCDD	3268-87-9	396 B	0.0902	10.5	1
11031	2378-TCDF	51207-31-9	0.159 JBQ	0.0436	1.05	1
11031	12378-PeCDF	57117-41-6	0.355 JB	0.0227	5.27	1
11031	23478-PeCDF	57117-31-4	0.299 JB	0.0216	5.27	1
11031	123478-HxCDF	70648-26-9	0.303 JB	0.0342	5.27	1
11031	123678-HxCDF	57117-44-9	0.268 JB	0.0327	5.27	1
11031	123789-HxCDF	72918-21-9	0.260 JB	0.0354	5.27	1
11031	234678-HxCDF	60851-34-5	0.364 JB	0.0346	5.27	1
11031	1234678-HpCDF	67562-39-4	4.16 JB	0.0307	5.27	1
11031	1234789-HpCDF	55673-89-7	0.450 JBQ	0.0392	5.27	1
11031	OCDF	39001-02-0	9.13 JB	0.0404	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	61	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164663
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-310 SDG#: DX022-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164663
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 18:02

Chantilly VA 20151

D-310 SDG#: DX022-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 23:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164664
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-312 SDG#: DX022-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164664
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-312 SDG#: DX022-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0561 JB	0.0169	1.05	1
11031	12378-PeCDD	40321-76-4	0.462 JB	0.0396	5.26	1
11031	123478-HxCDD	39227-28-6	1.03 JB	0.0309	5.26	1
11031	123678-HxCDD	57653-85-7	2.12 JB	0.0321	5.26	1
11031	123789-HxCDD	19408-74-3	1.93 JB	0.0322	5.26	1
11031	1234678-HpCDD	35822-46-9	67.2 B	0.0824	5.26	1
11031	OCDD	3268-87-9	820 B	0.0831	10.5	1
11031	2378-TCDF	51207-31-9	0.0388 JB	0.0239	1.05	1
11031	12378-PeCDF	57117-41-6	0.212 JB	0.0160	5.26	1
11031	23478-PeCDF	57117-31-4	0.286 JBQ	0.0151	5.26	1
11031	123478-HxCDF	70648-26-9	0.582 JB	0.0298	5.26	1
11031	123678-HxCDF	57117-44-9	0.579 JB	0.0281	5.26	1
11031	123789-HxCDF	72918-21-9	0.226 JBQ	0.0343	5.26	1
11031	234678-HxCDF	60851-34-5	0.785 JB	0.0286	5.26	1
11031	1234678-HpCDF	67562-39-4	11.3 B	0.0281	5.26	1
11031	1234789-HpCDF	55673-89-7	0.851 JB	0.0382	5.26	1
11031	OCDF	39001-02-0	23.6 B	0.0409	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164664
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-312 SDG#: DX022-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164664
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-312 SDG#: DX022-19

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/19/2011 00:15	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164665
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-025 SDG#: DX022-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164665
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-025 SDG#: DX022-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0310 U	0.0310	1.12	1
11031	12378-PeCDD	40321-76-4	0.156 JBQ	0.0435	5.58	1
11031	123478-HxCDD	39227-28-6	0.106 JB	0.0309	5.58	1
11031	123678-HxCDD	57653-85-7	0.324 JB	0.0326	5.58	1
11031	123789-HxCDD	19408-74-3	0.238 JBQ	0.0328	5.58	1
11031	1234678-HpCDD	35822-46-9	4.55 JB	0.0404	5.58	1
11031	OCDD	3268-87-9	31.4 B	0.0445	11.2	1
11031	2378-TCDF	51207-31-9	0.381 JBQ	0.0598	1.12	1
11031	12378-PeCDF	57117-41-6	0.291 JB	0.0230	5.58	1
11031	23478-PeCDF	57117-31-4	0.690 JB	0.0227	5.58	1
11031	123478-HxCDF	70648-26-9	0.219 JB	0.0273	5.58	1
11031	123678-HxCDF	57117-44-9	0.196 JB	0.0244	5.58	1
11031	123789-HxCDF	72918-21-9	0.0589 JB	0.0310	5.58	1
11031	234678-HxCDF	60851-34-5	0.243 JB	0.0262	5.58	1
11031	1234678-HpCDF	67562-39-4	1.34 JB	0.0290	5.58	1
11031	1234789-HpCDF	55673-89-7	0.142 JBQ	0.0444	5.58	1
11031	OCDF	39001-02-0	2.27 JB	0.0372	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164665
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-025 SDG#: DX022-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164665
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 18:02

D-025 SDG#: DX022-20*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/19/2011 01:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 06:02 PM

Group Number: 1225471

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10355162401A 28a Moisture Content by 160.3	Sample number(s): 6164644-6164656				100		80-120		
Batch number: 10355162401B 28a Moisture Content by 160.3	Sample number(s): 6164657-6164665				100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11004001	Sample number(s): 6164644-6164665								
2378-TCDD	0.0349 J	0.0141	1.00	ng/kg	107		67-158		
12378-PeCDD	0.244 J	0.0285	5.00	ng/kg	108		70-142		
123478-HxCDD	0.206 J	0.0286	5.00	ng/kg	108		70-164		
123678-HxCDD	0.259 J	0.0297	5.00	ng/kg	106		76-134		
123789-HxCDD	0.247 J	0.0290	5.00	ng/kg	107		64-162		
1234678-HpCDD	0.682 J	0.0437	5.00	ng/kg	107		70-140		
OCDD	1.49 J	0.0411	10.0	ng/kg	106		78-144		
2378-TCDF	0.0662 J	0.0140	1.00	ng/kg	118		75-158		
12378-PeCDF	0.242 J	0.0106	5.00	ng/kg	107		80-134		
23478-PeCDF	0.330 J	0.0109	5.00	ng/kg	107		68-160		
123478-HxCDF	0.370 J	0.0229	5.00	ng/kg	101		72-134		
123678-HxCDF	0.338 J	0.0196	5.00	ng/kg	100		84-130		
123789-HxCDF	0.320 J	0.0276	5.00	ng/kg	103		78-130		
234678-HxCDF	0.498 J	0.0219	5.00	ng/kg	102		70-156		
1234678-HpCDF	1.19 J	0.0206	5.00	ng/kg	102		82-122		
1234789-HpCDF	0.343 J	0.0351	5.00	ng/kg	103		78-138		
OCDF	1.16 J	0.0424	10.0	ng/kg	106		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10355162401A 28a Moisture Content by 160.3	Sample number(s): 6164644-6164656					BKG: P164622 4.1	4.0	1	20
Batch number: 10355162401B 28a Moisture Content by 160.3	Sample number(s): 6164657-6164665					BKG: P164635 6.2	6.0	3	20
Batch number: 11004001 2378-TCDD	Sample number(s): 6164644-6164665				UNSPK: 6164645 108				

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 06:02 PM

Group Number: 1225471

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
12378-PeCDD	108	108	70-142	0	25				
123478-HxCDD	111	110	70-164	1	25				
123678-HxCDD	108	108	76-134	0	25				
123789-HxCDD	110	109	64-162	0	25				
1234678-HpCDD	110	107	70-140	2	25				
OCDD	114	92	78-144	11	25				
2378-TCDF	108	112	75-158	3	25				
12378-PeCDF	108	110	80-134	1	25				
23478-PeCDF	107	109	68-160	2	25				
123478-HxCDF	103	104	72-134	1	25				
123678-HxCDF	102	104	84-130	1	25				
123789-HxCDF	105	105	78-130	1	25				
234678-HxCDF	104	105	70-156	1	25				
1234678-HpCDF	105	105	82-122	1	25				
1234789-HpCDF	104	105	78-138	1	25				
OCDF	108	105	63-170	3	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11004001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6164644	66	76	79	83	79	75
6164645	68	81	80	86	80	75
6164646	71	82	81	81	80	82
6164647	70	82	83	86	81	78
6164648	67	82	83	86	81	78
6164649	66	78	75	84	76	71
6164650	66	78	82	83	79	77
6164651	72	78	79	86	80	80
6164652	70	81	80	85	81	79
6164653	65	73	73	85	73	68
6164654	70	82	83	85	84	82
6164655	70	78	78	81	79	78
6164656	63	75	75	81	75	72
6164657	57	68	66	77	67	58
6164658	59	69	72	82	70	63
6164659	63	72	75	80	74	72
6164660	66	77	80	83	79	80
6164661	71	82	83	85	82	86
6164662	66	80	80	79	79	81
6164663	71	77	80	79	77	79
6164664	72	85	84	85	84	82
6164665	66	76	77	84	77	75
Blank	70	78	73	82	74	70
MS	71	82	81	81	80	82

*- Outside of specification

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- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 06:02 PM

Group Number: 1225471

Surrogate Quality Control

MSD	70	82	83	86	81	78
OPR	68	71	70	81	71	62
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6164644	91	76	70	77	71	76
6164645	96	69	57	78	76	78
6164646	81	78	67	75	75	74
6164647	89	73	63	82	77	77
6164648	90	69	57	81	76	78
6164649	97	70	63	75	74	75
6164650	82	71	59	77	71	74
6164651	90	70	57	80	74	77
6164652	94	72	61	79	76	78
6164653	102	64	56	76	71	75
6164654	86	72	59	79	75	79
6164655	85	75	66	78	74	76
6164656	90	69	61	73	71	73
6164657	95	52	41	72	67	69
6164658	102	59	49	72	67	72
6164659	89	64	54	79	70	75
6164660	88	75	69	76	72	76
6164661	84	81	75	80	77	79
6164662	78	77	66	75	72	75
6164663	76	74	64	75	71	75
6164664	82	74	60	80	78	81
6164665	87	70	61	75	73	77
Blank	95	67	59	83	76	76
MS	81	78	67	75	75	74
MSD	89	73	63	82	77	77
OPR	95	58	47	83	73	77
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6164644	74	73	75	71	73	79
6164645	75	76	76	69	75	86
6164646	74	74	74	66	79	84
6164647	78	76	75	69	77	85
6164648	77	75	74	67	76	84
6164649	75	76	78	72	71	85
6164650	73	71	70	61	75	79
6164651	75	77	74	68	78	85
6164652	76	77	77	71	74	84
6164653	73	73	73	69	68	84
6164654	76	77	74	66	78	79
6164655	73	74	73	67	74	80
6164656	74	72	71	66	70	80
6164657	67	67	68	60	63	77
6164658	69	69	72	66	65	76
6164659	72	71	70	65	70	78
6164660	75	75	73	70	75	78
6164661	78	77	77	73	79	83

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

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- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 06:02 PM

Group Number: 1225471

Surrogate Quality Control

6164662	73	72	71	62	76	77
6164663	73	72	68	61	75	76
6164664	80	78	75	64	81	83
6164665	75	74	74	66	72	80
Blank	76	75	75	70	71	85
MS	74	74	74	66	79	84
MSD	78	76	75	69	77	85
OPR	76	75	73	65	68	82
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

13013 1225471 6164644-65

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						Other Instructions and Notes																									
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP																															
Samplers: (Signature)																															
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOC/EPA 8260B	1,4-Dioxane EPA 8260M	SVOCs EPA 8270C & PAHs EPA 8270 SIM	TPH-GRO EPA 8015B	TPH-EPA EPA 8015B Mod.	*Metals EPA 6010/6020&7211A	*Hex Chrome EPA 7290*	*Fluoride EPA 8000	*PCBs EPA 8062	*Dieldrin/EPA 1631B	*Dieldrin EPA 1631B	*Perchlorate EPA 8140	Perchlorate Confirmation by EPA 8850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	*Nitrate EPA 8000	**Formaldehyde EPA 8151A	**NDMA EPA 1631C	**Emergals EPA 8300A	**Cyanide EPA 8002B	**PAH EPA 8040C	**Tributyltin EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B		
SL-002-SASC-SB-4.0-5.0	12.14.10	0942	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X	X	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	
SL-002-SASC-SB-9.0-10.0	12.14.10	0950	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X	X	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	
TB-121410	12.14.10	0800	water	HCl	2-40 ml VOA vials	X	X		X																						trip blank
EB02-SASB-121410	12.14.10	1230	water	none	6-1 liter ambers			X					X	X					X	X											rinsate
EB02-SASB-121410	12.14.10	1230	water	none	1-500 ml poly						X	X					X														rinsate
EB02-SASB-121410	12.14.10	1230	water	HNO3	1-500 ml poly					X																					rinsate
EB02-SASB-121410	12.14.10	1230	water	HCl	6-40 ml amber VOA vials	X	X		X																						rinsate
SL-002-SASC-SB-9.5	12.14.10	0948	soil	none	5 Encore Samplers	X	X		X																						
SL-002-SASC-SB-4.5	12.14.10	0938	soil	none	5 Encore Samplers	X	X		X																						
SL-004-SASC-SB-4.5	12.14.10	1104	soil	none	5 Encore Samplers	X	X		X																						
SL-004-SASC-SB-9.5	12.14.10	1115	soil	none	5 Encore Samplers	X	X		X																						
SL-004-SASC-SB-9.0-10.0	12.14.10	1118	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	
SL-004-SASC-SB-4.0-5.0	12.14.10	1111	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	
SL-140-SASC-SB-3.0-4.0	12.14.10	1428	soil	none	2 x 16 oz. jars			X		X	X	X	X	X	X	X	X														
SL-140-SASC-SB-3.5	12.14.10	1425	soil	none	5 Encore Samplers	X	X																								
DUPO5-SASB-QC-121410	12.14.10	0850	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											DUP
SL-120-SASB-SS-0.0-0.5MS	12.14.10	0847	soil	none	2 x 16 oz. jars & 2 6" sleeves			X		X	X	X	X	X	X	X	X		X	X											MS/MSD
SL-108-SASB-SS-0.0-0.5	12.14.10	0855	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-119-SASB-SS-0.0-0.5	12.14.10	0830	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-240-SASB-SS-0.0-0.5	12.14.10	0933	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-109-SASB-SS-0.0-0.5	12.14.10	0909	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-122-SASB-SS-0.0-0.5	12.14.10	0940	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-121-SASB-SS-0.0-0.5	12.14.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-054-SASB-SS-0.0-0.5	12.14.10	0921	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-105-SASB-SS-0.0-0.5	12.14.10	0835	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-098-SASB-SS-0.0-0.5	12.14.10	1043	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-142-SASB-SS-0.0-0.5	12.14.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-143-SASB-SS-0.0-0.5	12.14.10	1115	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-123-SASB-SS-0.0-0.5	12.14.10	1040	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-124-SASB-SS-0.0-0.5	12.14.10	1100	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-309-SASB-SS-0.0-0.5	12.14.10	1325	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-311-SASB-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-310-SASB-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-312-SASB-SS-0.0-0.5	12.14.10	1427	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SED-025-SIV-SD-0.0-0.5	12.14.10	1244	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SED-024-SIV-SD-0.0-0.5	12.14.10	1116	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SED-023-SIV-SD-0.0-0.5	12.14.10	0919	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SED-022-SIV-SD-0.0-0.5	12.14.10	1008	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-125-SASB-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-126-SASB-SS-0.0-0.5	12.14.10	1420	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-129-SASB-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-128-SASB-SS-0.0-0.5	12.14.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SED-027-SIV-SD-0.0-0.5	12.14.10	1559	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SED-026-SIV-SD-0.0-0.5	12.14.10	1522	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X	X		X	X											
SL-060-SASC-SB-10.0-11.0	12.14.10	1618	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	
SL-060-SASC-SB-10.5	12.14.10	1614	soil	none	5 Encore Samplers	X	X		X																						
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Laboratory:																							
		12.14.10 1700				12/14/10 1700		Lancaster Laboratories, Inc.																							
Received by: (Signature)		Date/Time		Alpha No.		No. of coolers = 5																									
				00732992																											
				Tracking Number 869514317156																											

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

January 19, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/15/2010

Group Number: 1225546

SDG: DE039

PO Number: 1203-004-007-AL

Release Number: Tracking #11667

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-002-SA5C-SB-4.0-5.0 Soil	6164941
SL-002-SA5C-SB-9.0-10.0 Soil	6164942
TB-121410 Water	6164943
EB02-SA5B-121410 Water	6164944
SL-004-SA5C-SB-9.0-10.0 Soil	6164945
SL-004-SA5C-SB-4.0-5.0 Soil	6164946
SL-140-SA5C-SB-3.0-4.0 Soil	6164947
SED-024-SIV-SD-0.0-0.5 Sediment	6164948
SED-023-SIV-SD-0.0-0.5 Sediment	6164949
SED-022-SIV-SD-0.0-0.5 Sediment	6164950
SL-125-SA5B-SS-0.0-0.5 Soil	6164951
SL-126-SA5B-SS-0.0-0.5 Soil	6164952
SL-129-SA5B-SS-0.0-0.5 Soil	6164953
SL-128-SA5B-SS-0.0-0.5 Soil	6164954
SED-027-SIV-SD-0.0-0.5 Sediment	6164955
SED-026-SIV-SD-0.0-0.5 Sediment	6164956
SL-060-SA5C-SB-10.0-11.0 Soil	6164957

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

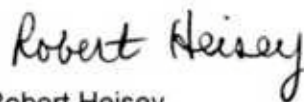
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Attn: Todd Burgess

1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey
Senior Specialist

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.1 U	7.1	8.5		0.99
06192	Benzene	71-43-2	0.11 U	0.11	4.2		0.99
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.2		0.99
06192	Bromochloromethane	74-97-5	0.35 U	0.35	4.2		0.99
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.2		0.99
06192	Bromoform	75-25-2	0.42 U	0.42	4.2		0.99
06192	Bromomethane	74-83-9	0.27 U	0.27	4.2		0.99
06192	2-Butanone	78-93-3	1.3 U	1.3	8.5		0.99
06192	n-Butylbenzene	104-51-8	0.13 U	0.13	4.2		0.99
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.2		0.99
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.2		0.99
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.2		0.99
06192	Chlorobenzene	108-90-7	0.12 U	0.12	4.2		0.99
06192	Chloroethane	75-00-3	0.14 U	0.14	4.2		0.99
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.32 U	0.32	4.2		0.99
06192	Chloroform	67-66-3	0.13 U	0.13	4.2		0.99
06192	Chloromethane	74-87-3	0.35 U	0.35	4.2		0.99
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.2		0.99
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.2		0.99
06192	Chlorotrifluoroethene	79-38-9	0.53 U	0.53	5.3		0.99
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.74 U	0.74	4.2		0.99
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.2		0.99
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.2		0.99
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.2		0.99
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.2		0.99
06192	1,3-Dichlorobenzene	541-73-1	0.13 U	0.13	4.2		0.99
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.2		0.99
06192	Dichlorodifluoromethane	75-71-8	0.13 U	0.13	4.2		0.99
06192	1,1-Dichloroethane	75-34-3	0.11 U	0.11	4.2		0.99
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.2		0.99
06192	1,1-Dichloroethene	75-35-4	0.41 U	0.41	4.2		0.99
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.2		0.99
06192	trans-1,2-Dichloroethene	156-60-5	0.13 U	0.13	4.2		0.99
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.2		0.99
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.2		0.99
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.2		0.99
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.2		0.99
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.2		0.99
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.2		0.99
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.2		0.99
06192	Freon 113	76-13-1	0.12 U	0.12	4.2		0.99
06192	Freon 133a	75-88-7	0.53 U	0.53	5.3		0.99
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.2		0.99
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.5		0.99
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.2		0.99
06192	p-Isopropyltoluene	99-87-6	0.12 U	0.12	4.2		0.99
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.2		0.99
06192	4-Methyl-2-pentanone	108-10-1	0.41 U	0.41	8.5		0.99
06192	Methylene Chloride	75-09-2	1.2 J	0.25	4.2		0.99
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.2		0.99

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.11 U	0.11	4.2		0.99
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12 U	0.12	4.2		0.99
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.2		0.99
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.2		0.99
06192	Toluene	108-88-3	0.11 J	0.09	4.2		0.99
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.2		0.99
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.2		0.99
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.2		0.99
06192	1,1,2-Trichloroethane	79-00-5	0.29 U	0.29	4.2		0.99
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.2		0.99
06192	Trichlorofluoromethane	75-69-4	0.31 U	0.31	4.2		0.99
06192	1,2,3-Trichloropropane	96-18-4	0.35 U	0.35	4.2		0.99
06192	1,2,4-Trimethylbenzene	95-63-6	0.42 U	0.42	4.2		0.99
06192	1,3,5-Trimethylbenzene	108-67-8	0.11 U	0.11	4.2		0.99
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.2		0.99
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.2		0.99
06192	o-Xylene	95-47-6	0.18 U	0.18	4.2		0.99
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.2 U	5.2	15		24.22
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	112	17.8	35.5		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	530		1
04688	Benzyl alcohol	100-51-6	180	U 180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	71	U 71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530		1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	71	U 71	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	530		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.71	U 0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.71	U 0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U 0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U 0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U 0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4	U 6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4	U 6.4	19		1
10138	Chrysene	218-01-9	0.36	U 0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U 0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.4	U 6.4	19		1
10138	Fluoranthene	206-44-0	0.71	U 0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U 0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U 0.71	1.8		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
			ug/kg	ug/kg	ug/kg	ug/kg	
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8		1
10138	Naphthalene	91-20-3	0.71 U	0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19		1
10138	Phenanthrene	85-01-8	0.71 U	0.71	1.8		1
10138	Pyrene	129-00-0	0.71 U	0.71	1.8		1
The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
GC Volatiles TPH GRO SW-846 8015B mod							
			mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.0		24.61
Explosives SW-846 8330A							
			ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	80	U 80	160	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	53	U 53	160	1000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U 110	320	1000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U 110	320	1000000	1
10132	1,3-Dinitrobenzene	99-65-0	53	U 53	160	1000000	1
10132	2,4-Dinitrotoluene	121-14-2	53	U 53	160	1000000	1
10132	2,6-Dinitrotoluene	606-20-2	53	U 53	160	1000000	1
10132	HMX	2691-41-0	130	U 130	400	1000000	1
10132	Nitrobenzene	98-95-3	53	U 53	160	1000000	1
10132	Nitroglycerin	55-63-0	1,100	U 1,100	3,200	1000000	1
10132	2-Nitrotoluene	88-72-2	110	U 110	160	1000000	1
10132	3-Nitrotoluene	99-08-1	130	U 130	160	1000000	1
10132	4-Nitrotoluene	99-99-0	110	U 110	160	1000000	1
10132	PETN	78-11-5	1,100	U 1,100	3,200	1000000	1
10132	RDX	121-82-4	67	U 67	160	1000000	1
10132	Tetryl	479-45-8	82	U 82	160	1000000	1

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Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	53	U 53	160	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	53	U 53	160	1000000 0	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by 8315A	50-00-0	640	U 640	1,600		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U 1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1	U 1.1	3.5		1
10225	Aroclor 5460	11126-42-4	1.1	U 1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35	U 0.35	1.8		1
10225	PCB-1221	11104-28-2	0.53	U 0.53	1.8		1
10225	PCB-1232	11141-16-5	0.55	U 0.55	1.8		1
10225	PCB-1242	53469-21-9	0.53	U 0.53	1.8		1
10225	PCB-1248	12672-29-6	0.35	U 0.35	1.8		1
10225	PCB-1254	11097-69-1	0.35	U 0.35	1.8		1
10225	PCB-1260	11096-82-5	0.35	U 0.35	1.8		1
10225	PCB-1262	37324-23-5	0.35	U 0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35	U 0.35	1.8		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.43	U 0.43	1.3		1
10199	EFH (C15-C20)	n.a.	0.43	U 0.43	1.3		1
10199	EFH (C21-C30)	n.a.	0.59	J 0.43	1.3		1
10199	EFH (C30 - C40)	n.a.	0.74	J 0.43	1.3		1
10199	EFH (C8-C11)	n.a.	0.43	U 0.43	1.3		1
The beginning CCV was outside method criteria. Due to limited extract volume a re-analysis could not be performed; therefore, the data is reported.							
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110	U 110	530		1
10501	Isopropanol	67-63-0	110	U 110	530		1
10501	Methanol	67-56-1	130	J 110	530		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.3	U 5.3	13		1
08283	Ethylene glycol	107-21-1	5.3	U 5.3	13		1
08283	Propylene glycol	57-55-6	5.3	U 5.3	13		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.7		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.7		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.7		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,500	5.31	21.1		1
07914	Boron	7440-42-8	2.97 J	0.939	5.28		1
01650	Calcium	7440-70-2	3,200	6.47	21.1		1
01654	Iron	7439-89-6	19,800	4.97	21.1		1
01656	Lithium	7439-93-2	22.8	0.23	2.1		1
01657	Magnesium	7439-95-4	3,970	2.68	10.6		1
06958	Manganese	7439-96-5	315	0.0823	0.528		1
10145	Phosphorus	7723-14-0	330	0.591	10.6		1
01662	Potassium	7440-09-7	2,520	19.0	52.8		1
01667	Sodium	7440-23-5	95.4 J	39.4	106		1
07968	Strontium	7440-24-6	12.3	0.0654	0.528		1
06969	Tin	7440-31-5	2.76 J	1.06	10.6		1
06970	Titanium	7440-32-6	1,220	0.401	1.06		1
10146	Zirconium	7440-67-7	0.887 U	0.887	5.28		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.160 J	0.0633	0.211		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.59	0.0633	0.422		2
06126	Barium	7440-39-3	63.6	0.114	0.422		2
06127	Beryllium	7440-41-7	0.531	0.0169	0.106		2
06128	Cadmium	7440-43-9	0.0891 J	0.0380	0.106		2
06131	Chromium	7440-47-3	14.1	0.127	0.422		2
06132	Cobalt	7440-48-4	5.63	0.0211	0.106		2
06133	Copper	7440-50-8	5.77	0.0697	0.422		2
06135	Lead	7439-92-1	4.71	0.0110	0.211		2
06138	Molybdenum	7439-98-7	0.470	0.0528	0.106		2
06139	Nickel	7440-02-0	8.46	0.106	0.422		2
06141	Selenium	7782-49-2	0.101 J	0.0422	0.422		2
06142	Silver	7440-22-4	0.0148 J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.356	0.0317	0.106		2
06148	Vanadium	7440-62-2	29.5	0.0232	0.106		2
06149	Zinc	7440-66-6	59.4	0.591	3.17		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.106		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.85 U	0.85	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.8	0.85	1.6		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.0	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.32 J	0.21	1.1	mg/kg	1
SW-846 9012B							
05895	21a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.53	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	459	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	8.45	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-002-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 19:47	Laura M Krieger	0.99
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 12:01	Jason M Long	24.22
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:22	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034923319	12/15/2010 22:20	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10361SLB026	01/05/2011 18:08	Timothy J Trees	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3901 SDG#: DE039-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 11:27	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 18:06	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10361SLB026	12/27/2010 08:15	Joseph S Feister	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34B	12/17/2010 13:36	Elizabeth J Marin	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:19	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 09:33	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 00:43	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 21:12	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103570006A	12/27/2010 12:25	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 23:35	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103510010A	12/21/2010 20:36	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550027A	12/23/2010 22:59	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	103570006A	12/23/2010 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550027A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103510010A	12/17/2010 12:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3901 SDG#: DE039-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 11:59	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 11:59	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/28/2010 17:23	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:03	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/07/2011 23:59	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11007007201A	01/07/2011 23:59	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 14:47	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 12:14	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:23	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	34	6.9	8.3		0.86
06192	Benzene	71-43-2	0.10 U	0.10	4.1		0.86
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.1		0.86
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.1		0.86
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.1		0.86
06192	Bromoform	75-25-2	0.41 U	0.41	4.1		0.86
06192	Bromomethane	74-83-9	0.26 U	0.26	4.1		0.86
06192	2-Butanone	78-93-3	5.6 J	1.3	8.3		0.86
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.1		0.86
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.1		0.86
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.1		0.86
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.1		0.86
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.1		0.86
06192	Chloroethane	75-00-3	0.13 U	0.13	4.1		0.86
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.1		0.86
06192	Chloroform	67-66-3	0.12 U	0.12	4.1		0.86
06192	Chloromethane	74-87-3	0.34 U	0.34	4.1		0.86
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.1		0.86
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.1		0.86
06192	Chlorotrifluoroethene	79-38-9	0.52 U	0.52	5.2		0.86
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.72 U	0.72	4.1		0.86
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.1		0.86
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.1		0.86
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.1		0.86
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.1		0.86
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.1		0.86
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.1		0.86
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.1		0.86
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.1		0.86
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.1		0.86
06192	1,1-Dichloroethene	75-35-4	0.40 U	0.40	4.1		0.86
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.1		0.86
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.1		0.86
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.1		0.86
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.1		0.86
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.1		0.86
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.1		0.86
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.1		0.86
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.1		0.86
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.1		0.86
06192	Freon 113	76-13-1	0.11 U	0.11	4.1		0.86
06192	Freon 133a	75-88-7	0.52 U	0.52	5.2		0.86
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.1		0.86
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.3		0.86
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.1		0.86
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.1		0.86
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.1		0.86
06192	4-Methyl-2-pentanone	108-10-1	0.40 U	0.40	8.3		0.86
06192	Methylene Chloride	75-09-2	0.88 J	0.25	4.1		0.86
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.1		0.86

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.1		0.86
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.1		0.86
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.1		0.86
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.1		0.86
06192	Toluene	108-88-3	0.09 J	0.08	4.1		0.86
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.1		0.86
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.1		0.86
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.1		0.86
06192	1,1,2-Trichloroethane	79-00-5	0.28 U	0.28	4.1		0.86
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.1		0.86
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.1		0.86
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.1		0.86
06192	1,2,4-Trimethylbenzene	95-63-6	0.41 U	0.41	4.1		0.86
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.1		0.86
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.1		0.86
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.1		0.86
06192	o-Xylene	95-47-6	0.18 U	0.18	4.1		0.86
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.0 U	5.0	15		20.83
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	161	40.0	80.0		2
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	600		1
04688	Benzidine	92-87-5	1,400	U 1,400	4,000		1
04688	Benzoic acid	65-85-0	200	U 200	600		1
04688	Benzyl alcohol	100-51-6	200	U 200	600		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200		1
04688	Carbazole	86-74-8	20	U 20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40	U 40	200		1
04688	4-Chloroaniline	106-47-8	80	U 80	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200		1
04688	2-Chlorophenol	95-57-8	20	U 20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U 40	200		1
04688	Dibenzofuran	132-64-9	20	U 20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	400		1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200		1
04688	2,4-Dimethylphenol	105-67-9	40	U 40	200		1
04688	3,5-Dimethylphenol	108-68-9	40	U 40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	600		1
04688	2,4-Dinitrophenol	51-28-5	800	U 800	2,400		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	40	U 40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200		1
04688	Hexachlorobenzene	118-74-1	20	U 20	200		1
04688	Hexachlorobutadiene	87-68-3	80	U 80	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	600		1
04688	Hexachloroethane	67-72-1	20	U 20	200		1
04688	Isophorone	78-59-1	20	U 20	200		1
04688	2-Methylphenol	95-48-7	40	U 40	200		1
04688	4-Methylphenol	106-44-5	40	U 40	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U 20	200		1
04688	3-Nitroaniline	99-09-2	40	U 40	200		1
04688	4-Nitroaniline	100-01-6	80	U 80	200		1
04688	Nitrobenzene	98-95-3	20	U 20	200		1
04688	2-Nitrophenol	88-75-5	20	U 20	200		1
04688	4-Nitrophenol	100-02-7	200	U 200	600		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U 200	600		1
04688	Phenol	108-95-2	20	U 20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U 20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U 40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U 40	200		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.80	U 0.80	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U 0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U 0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.80	U 0.80	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.80	U 0.80	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.80	U 0.80	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U 0.80	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U 0.80	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U 7.2	22		1
10138	Di-n-butylphthalate	84-74-2	7.2	U 7.2	22		1
10138	Chrysene	218-01-9	0.41	J 0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U 0.80	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U 7.2	22		1
10138	Dimethylphthalate	131-11-3	7.2	U 7.2	22		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.2	U 7.2	22		1
10138	Fluoranthene	206-44-0	0.80	U 0.80	2.0		1
10138	Fluorene	86-73-7	0.80	U 0.80	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U 0.80	2.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	1-Methylnaphthalene	90-12-0	0.80 U	0.80	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.80 U	0.80	2.0		1
10138	Naphthalene	91-20-3	0.80 U	0.80	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.80 U	0.80	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2 U	7.2	22		1
10138	Phenanthrene	85-01-8	0.80 U	0.80	2.0		1
10138	Pyrene	129-00-0	0.80 U	0.80	2.0		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

GC Volatiles	TPH GRO	SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.1		22.4

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	90 U	90	180	1000000 1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	60 U	60	180	1000000 1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120 U	120	360	1000000 1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120 U	120	360	1000000 1
10132	1,3-Dinitrobenzene	99-65-0	60 U	60	180	1000000 1
10132	2,4-Dinitrotoluene	121-14-2	60 U	60	180	1000000 1
10132	2,6-Dinitrotoluene	606-20-2	60 U	60	180	1000000 1
10132	HMX	2691-41-0	150 U	150	450	1000000 1
10132	Nitrobenzene	98-95-3	60 U	60	180	1000000 1
10132	Nitroglycerin	55-63-0	1,200 U	1,200	3,600	1000000 1
10132	2-Nitrotoluene	88-72-2	120 U	120	180	1000000 1
10132	3-Nitrotoluene	99-08-1	150 U	150	180	1000000 1
10132	4-Nitrotoluene	99-99-0	120 U	120	180	1000000 1
10132	PETN	78-11-5	1,200 U	1,200	3,600	1000000 1
10132	RDX	121-82-4	75 U	75	180	1000000 1
10132	Tetryl	479-45-8	92 U	92	180	1000000 1

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Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	60	U 60	180	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	60	U 60	180	10000000	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by 8315A	50-00-0	3,800	720	1,800		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2	U 1.2	4.0		1
10225	Aroclor 5442	12642-23-8	1.2	U 1.2	4.0		1
10225	Aroclor 5460	11126-42-4	1.2	U 1.2	4.0		1
10225	PCB-1016	12674-11-2	0.40	U 0.40	2.0		1
10225	PCB-1221	11104-28-2	0.60	U 0.60	2.0		1
10225	PCB-1232	11141-16-5	0.62	U 0.62	2.0		1
10225	PCB-1242	53469-21-9	0.60	U 0.60	2.0		1
10225	PCB-1248	12672-29-6	0.40	U 0.40	2.0		1
10225	PCB-1254	11097-69-1	0.40	U 0.40	2.0		1
10225	PCB-1260	11096-82-5	0.40	U 0.40	2.0		1
10225	PCB-1262	37324-23-5	0.40	U 0.40	2.0		1
10225	PCB-1268	11100-14-4	0.40	U 0.40	2.0		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.48	U 0.48	1.4		1
10199	EFH (C15-C20)	n.a.	0.48	U 0.48	1.4		1
10199	EFH (C21-C30)	n.a.	0.96	J 0.48	1.4		1
10199	EFH (C30 - C40)	n.a.	2.0	U 0.48	1.4		1
10199	EFH (C8-C11)	n.a.	0.48	U 0.48	1.4		1
The beginning CCV was outside method criteria. Due to limited extract volume a re-analysis could not be performed; therefore, the data is reported.							
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120	U 120	600		1
10501	Isopropanol	67-63-0	120	U 120	600		1
10501	Methanol	67-56-1	690	120	600		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	6.0	U 6.0	15		1
08283	Ethylene glycol	107-21-1	6.0	U 6.0	15		1
08283	Propylene glycol	57-55-6	6.0	U 6.0	15		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls								
	SW-846 8015B		mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	2.7	U	2.7	6.3		1
10318	o-Terphenyl	84-15-1	2.7	U	2.7	6.3		1
10318	p-Terphenyl	92-94-4	2.7	U	2.7	6.3		1
Reporting limits were raised due to limited sample volume.								
Metals								
	SW-846 6010B		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	32,300		5.81	23.1		1
07914	Boron	7440-42-8	5.03	J	1.03	5.77		1
01650	Calcium	7440-70-2	24,300		7.08	23.1		1
01654	Iron	7439-89-6	35,300		10.9	46.2		2
01656	Lithium	7439-93-2	27.6		0.25	2.3		1
01657	Magnesium	7439-95-4	8,070		2.93	11.5		1
06958	Manganese	7439-96-5	429		0.0900	0.577		1
10145	Phosphorus	7723-14-0	421		0.646	11.5		1
01662	Potassium	7440-09-7	3,910		20.8	57.7		1
01667	Sodium	7440-23-5	264		43.1	115		1
07968	Strontium	7440-24-6	45.5		0.0716	0.577		1
06969	Tin	7440-31-5	3.01	J	1.15	11.5		1
06970	Titanium	7440-32-6	1,550		0.439	1.15		1
10146	Zirconium	7440-67-7	5.23	J	0.970	5.77		1
	SW-846 6020		mg/kg		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.340		0.0706	0.235		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.								
06125	Arsenic	7440-38-2	8.72		0.0706	0.471		2
06126	Barium	7440-39-3	160		0.127	0.471		2
06127	Beryllium	7440-41-7	0.902		0.0188	0.118		2
06128	Cadmium	7440-43-9	0.454		0.0424	0.118		2
06131	Chromium	7440-47-3	41.1		0.141	0.471		2
06132	Cobalt	7440-48-4	9.79		0.0235	0.118		2
06133	Copper	7440-50-8	16.7		0.0777	0.471		2
06135	Lead	7439-92-1	13.1		0.0122	0.235		2
06138	Molybdenum	7439-98-7	0.624		0.0588	0.118		2
06139	Nickel	7440-02-0	19.9		0.118	0.471		2
06141	Selenium	7782-49-2	0.186	J	0.0471	0.471		2
06142	Silver	7440-22-4	0.0442	J	0.0141	0.118		2
06145	Thallium	7440-28-0	0.381		0.0353	0.118		2
06148	Vanadium	7440-62-2	76.0		0.0259	0.118		2
06149	Zinc	7440-66-6	80.0		0.659	3.53		2
	SW-846 7471A		mg/kg		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0046	J	0.0034	0.119		1
Wet Chemistry								
	EPA 300.0		mg/kg		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.7		0.96	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1	J	0.96	1.8		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8 U	10.8	36.0	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.51 J	0.24	1.2	mg/kg	1
SW-846 9012B							
05895	21a Cyanide by 9012B	57-12-5	0.23 U	0.23	0.63	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	446	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	7.77	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	16.7	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-002-SA5C-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 20:09	Laura M Krieger	0.86
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 12:21	Jason M Long	20.83
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:27	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034923319	12/15/2010 22:25	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10361SLB026	01/14/2011 13:54	Timothy J Trees	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3902 SDG#: DE039-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 13:11	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 19:50	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10361SLB026	12/27/2010 08:15	Joseph S Feister	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34B	12/17/2010 14:12	Elizabeth J Marin	22.4
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:24	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 10:15	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 00:53	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 21:31	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103570006A	12/27/2010 12:50	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/21/2010 00:04	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103510010A	12/21/2010 19:48	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550027A	12/23/2010 23:44	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	103570006A	12/23/2010 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550027A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103510010A	12/17/2010 12:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 20:43	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3902 SDG#: DE039-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 13:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 13:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 13:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:11	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 00:42	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11007007201A	01/08/2011 00:42	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 15:59	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11001243201A	01/04/2011 13:58	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:24	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: TB-121410 Water
SSFL Area IV Collocated Soil Sampling
TB-121410

LLI Sample # WW 6164943
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3903 SDG#: DE039-03TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B SIM		ug/l	ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5 U	0.5	2.0		1
GC Volatiles	TPH GRO SW-8015B		ug/l	ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103502AA	12/16/2010 19:32	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103502AA	12/16/2010 19:32	Sara E Johnson	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	10350A94A	12/17/2010 17:00	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	10350A94A	12/17/2010 17:00	Katrina T Longenecker	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6 U	6	20		1
10904	Benzene	71-43-2	0.5 U	0.5	5		1
10904	Bromobenzene	108-86-1	1 U	1	5		1
10904	Bromochloromethane	74-97-5	1 U	1	5		1
10904	Bromodichloromethane	75-27-4	1 U	1	5		1
10904	Bromoform	75-25-2	1 U	1	5		1
10904	Bromomethane	74-83-9	1 U	1	5		1
10904	2-Butanone	78-93-3	3 U	3	10		1
10904	n-Butylbenzene	104-51-8	1 U	1	5		1
10904	sec-Butylbenzene	135-98-8	1 U	1	5		1
10904	tert-Butylbenzene	98-06-6	1 U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1 U	1	5		1
10904	Chlorobenzene	108-90-7	0.8 U	0.8	5		1
10904	Chloroethane	75-00-3	1 U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2 U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10904	Chloroform	67-66-3	0.8 U	0.8	5		1
10904	Chloromethane	74-87-3	1 U	1	5		1
10904	2-Chlorotoluene	95-49-8	1 U	1	5		1
10904	4-Chlorotoluene	106-43-4	1 U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2 U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2 U	2	5		1
10904	Dibromochloromethane	124-48-1	1 U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1 U	1	5		1
10904	Dibromomethane	74-95-3	1 U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2 U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1 U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1 U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8 U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8 U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8 U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1 U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1 U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1 U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1 U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1 U	1	5		1
10904	Ethylbenzene	100-41-4	0.8 U	0.8	5		1
10904	Freon 113	76-13-1	2 U	2	10		1
10904	Freon 133a	75-88-7	2 U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2 U	2	5		1
10904	2-Hexanone	591-78-6	3 U	3	10		1
10904	Isopropylbenzene	98-82-8	1 U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1 U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3 U	3	10		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l		ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2	U	2	5		1
10904	n-Propylbenzene	103-65-1	1	U	1	5		1
10904	Styrene	100-42-5	1	U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8	U	0.8	5		1
10904	Toluene	108-88-3	0.7	U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1	U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8	U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8	U	0.8	5		1
10904	Trichloroethene	79-01-6	1	U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2	U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1	U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5		1
10904	Vinyl Chloride	75-01-4	1	U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8	U	0.8	5		1
10904	o-Xylene	95-47-6	0.8	U	0.8	5		1
GC/MS	Volatiles	SW-846 8260B SIM	ug/l		ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0		1
GC/MS	Semivolatiles	SW-846 8270C	ug/l		ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1	U	1	5		1
04678	Benzidine	92-87-5	20	U	20	60		1
04678	Benzoic acid	65-85-0	6	U	6	15		1
04678	Benzyl alcohol	100-51-6	5	U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5		1
04678	Carbazole	86-74-8	1	U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5		1
04678	4-Chloroaniline	106-47-8	1	U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5		1
04678	2-Chlorophenol	95-57-8	1	U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5		1
04678	Dibenzofuran	132-64-9	1	U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10	U	10	30		1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	2,6-Dinitrotoluene	606-20-2	1 U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1 U	1	5		1
04678	Hexachlorobenzene	118-74-1	1 U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1 U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5 U	5	15		1
04678	Hexachloroethane	67-72-1	1 U	1	5		1
04678	Isophorone	78-59-1	1 U	1	5		1
04678	2-Methylphenol	95-48-7	1 U	1	5		1
04678	4-Methylphenol	106-44-5	2 U	2	5		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1 U	1	5		1
04678	3-Nitroaniline	99-09-2	1 U	1	5		1
04678	4-Nitroaniline	100-01-6	1 U	1	5		1
04678	Nitrobenzene	98-95-3	1 U	1	5		1
04678	2-Nitrophenol	88-75-5	1 U	1	5		1
04678	4-Nitrophenol	100-02-7	10 U	10	30		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3 U	3	15		1
04678	Phenol	108-95-2	1 U	1	5		1
04678	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1 U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1 U	1	5		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010 U	0.010	0.052		1
10137	Acenaphthylene	208-96-8	0.010 U	0.010	0.052		1
10137	Anthracene	120-12-7	0.010 U	0.010	0.052		1
10137	Benzo(a)anthracene	56-55-3	0.010 U	0.010	0.052		1
10137	Benzo(a)pyrene	50-32-8	0.010 U	0.010	0.052		1
10137	Benzo(b)fluoranthene	205-99-2	0.010 U	0.010	0.052		1
10137	Benzo(g,h,i)perylene	191-24-2	0.010 U	0.010	0.052		1
10137	Benzo(k)fluoranthene	207-08-9	0.010 U	0.010	0.052		1
10137	Butylbenzylphthalate	85-68-7	0.060 J	0.052	1.0		1
10137	Di-n-butylphthalate	84-74-2	0.15 J	0.052	1.0		1
10137	Chrysene	218-01-9	0.010 U	0.010	0.052		1
10137	Dibenz(a,h)anthracene	53-70-3	0.010 U	0.010	0.052		1
10137	Diethylphthalate	84-66-2	0.12 J	0.052	1.0		1
10137	Dimethylphthalate	131-11-3	0.052 U	0.052	1.0		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.16 J	0.052	1.0		1
10137	Fluoranthene	206-44-0	0.010 U	0.010	0.052		1
10137	Fluorene	86-73-7	0.010 U	0.010	0.052		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010 U	0.010	0.052		1
10137	1-Methylnaphthalene	90-12-0	0.010 U	0.010	0.052		1

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Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10137	2-Methylnaphthalene	91-57-6	0.010 U	0.010	0.052		1
10137	Naphthalene	91-20-3	0.027 J	0.010	0.052		1
10137	N-Nitrosodimethylamine	62-75-9	0.010 U	0.010	0.052		1
10137	Di-n-octylphthalate	117-84-0	0.083 J	0.052	1.0		1
10137	Phenanthrene	85-01-8	0.010 U	0.010	0.052		1
10137	Pyrene	129-00-0	0.010 U	0.010	0.052		1
Butylbenzylphthalate was detected in the method blank at a concentration of .055 ug/l. The blank value was not subtracted from the analytical result.							
The recoveries of several compounds were outside of QC limits in the LCS/LCSD associated with this sample. Sufficient sample was unavailable to repeat the analysis.							
GC Volatiles TPH GRO SW-8015B							
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50		1
Herbicides SW-846 8151A							
10407	2,4-D	94-75-7	0.16 U	0.16	0.49		1
10407	Dalapon	75-99-0	0.24 U	0.24	1.2		1
10407	2,4-DB	94-82-6	0.29 U	0.29	0.97		1
10407	Dicamba	1918-00-9	0.078 U	0.078	0.29		1
10407	Dinoseb	88-85-7	0.097 U	0.097	0.49		1
10407	2,4-DP (Dichlorprop)	120-36-5	0.16 U	0.16	0.49		1
10407	MCPA	94-74-6	290 U	290	970		1
10407	MCPP	93-65-2	49 U	49	190		1
10407	2,4,5-T	93-76-5	0.015 U	0.015	0.049		1
10407	2,4,5-TP	93-72-1	0.0097 U	0.0097	0.049		1
Pesticides/PCBs SW-846 8081A							
00177	Aldrin	309-00-2	0.0019 U	0.0019	0.0096		1
00177	Alpha BHC	319-84-6	0.0029 U	0.0029	0.0096		1
00177	Beta BHC	319-85-7	0.0028 U	0.0028	0.0096		1
00177	Gamma BHC - Lindane	58-89-9	0.0019 U	0.0019	0.0096		1
00177	Chlordane	57-74-9	0.12 U	0.12	0.48		1
00177	p,p-DDD	72-54-8	0.0048 U	0.0048	0.019		1
00177	p,p-DDE	72-55-9	0.0048 U	0.0048	0.019		1
00177	p,p-DDT	50-29-3	0.0048 U	0.0048	0.019		1
00177	Delta BHC	319-86-8	0.0028 U	0.0028	0.0096		1
00177	Dieldrin	60-57-1	0.0051 U	0.0051	0.019		1
00177	Endosulfan I	959-98-8	0.0041 U	0.0041	0.0096		1
00177	Endosulfan II	33213-65-9	0.014 U	0.014	0.019		1
00177	Endosulfan Sulfate	1031-07-8	0.0056 U	0.0056	0.019		1
00177	Endrin	72-20-8	0.0078 U	0.0078	0.019		1
00177	Endrin Aldehyde	7421-93-4	0.019 U	0.019	0.096		1
00177	Endrin Ketone	53494-70-5	0.0048 U	0.0048	0.019		1
00177	Heptachlor	76-44-8	0.0025 U	0.0025	0.0096		1
00177	Heptachlor Epoxide	1024-57-3	0.0022 U	0.0022	0.0096		1
00177	Methoxychlor	72-43-5	0.029 U	0.029	0.096		1
00177	Mirex	2385-85-5	0.081 U	0.081	0.24		1

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Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs SW-846 8081A							
00177	Toxaphene	8001-35-2	0.96 U	0.96	2.9	ug/l	1
Pesticides/PCBs SW-846 8082							
10227	Aroclor 5432	63496-31-1	0.096 U	0.096	0.48	ug/l	1
10227	Aroclor 5442	12642-23-8	0.096 U	0.096	0.48	ug/l	1
10227	Aroclor 5460	11126-42-4	0.096 U	0.096	0.48	ug/l	1
10227	PCB-1016	12674-11-2	0.096 U	0.096	0.48	ug/l	1
10227	PCB-1221	11104-28-2	0.096 U	0.096	0.48	ug/l	1
10227	PCB-1232	11141-16-5	0.19 U	0.19	0.48	ug/l	1
10227	PCB-1242	53469-21-9	0.096 U	0.096	0.48	ug/l	1
10227	PCB-1248	12672-29-6	0.096 U	0.096	0.48	ug/l	1
10227	PCB-1254	11097-69-1	0.096 U	0.096	0.48	ug/l	1
10227	PCB-1260	11096-82-5	0.096 U	0.096	0.48	ug/l	1
10227	PCB-1262	37324-23-5	0.19 U	0.19	0.48	ug/l	1
10227	PCB-1268	11100-14-4	0.15 U	0.15	0.48	ug/l	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals SW-846 6010B							
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200	mg/l	1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500	mg/l	1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200	mg/l	1
01754	Iron	7439-89-6	0.0533 J	0.0522	0.200	mg/l	1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200	mg/l	1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100	mg/l	1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050	mg/l	1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100	mg/l	1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500	mg/l	1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00	mg/l	1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050	mg/l	1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200	mg/l	1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100	mg/l	1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500	mg/l	1
SW-846 6020							
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010	mg/l	1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020	mg/l	1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020	mg/l	1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050	mg/l	1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050	mg/l	1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020	mg/l	1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050	mg/l	1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020	mg/l	1
06035	Lead	7439-92-1	0.000075 J	0.000052	0.0010	mg/l	1
06038	Molybdenum	7439-98-7	0.00032 J	0.00025	0.00050	mg/l	1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020	mg/l	1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020	mg/l	1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050	mg/l	1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050	mg/l	1

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Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/l	mg/l	mg/l	mg/l	
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
	SW-846 7470A		mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry							
	EPA 300.0		mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
	EPA 314.0		ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
	SW-846 7199		ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y103512AA	12/18/2010 00:25	Frank A Valla, Jr	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103502AA	12/16/2010 19:52	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103502AA	12/16/2010 19:52	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y103512AA	12/18/2010 00:25	Frank A Valla, Jr	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10350WAB026	12/31/2010 23:03	Ryan P Byrne	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350WAH026	01/04/2011 16:23	Gregory J Drahovsky	1
00813	BNA Water Extraction	SW-846 3510C	1	10350WAB026	12/16/2010 14:50	Timothy J Attenberger	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	10350WAH026	12/17/2010 10:00	Olivia Arosemena	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	10350A94A	12/17/2010 17:27	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	10350A94A	12/17/2010 17:27	Katrina T Longenecker	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103500036A	12/20/2010 00:47	John W Perkins	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103500016A	12/24/2010 11:27	Lisa A Reinert	1

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Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3904 SDG#: DE039-04EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103500017A	12/22/2010 09:42	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103500017A	12/16/2010 21:25	Karen L Beyer	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103500016A	12/16/2010 21:25	Karen L Beyer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103500036A	12/17/2010 12:30	Olivia I Santiago	1
01743	Aluminum	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
08014	Boron	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
01754	Iron	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
01756	Lithium	SW-846 6010B	1	103551848003	12/23/2010 17:02	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103551848003	12/23/2010 17:02	John P Hook	1
07058	Manganese	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
01762	Potassium	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
01767	Sodium	SW-846 6010B	1	103551848003	12/23/2010 17:02	John P Hook	1
08068	Strontium	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
07069	Tin	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
07070	Titanium	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
10144	Zirconium	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
06024	Antimony	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103556050002D	12/23/2010 20:21	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103556050002C	12/23/2010 20:21	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103556050002B	12/23/2010 20:21	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103545713001	12/21/2010 06:27	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103551848003	12/22/2010 09:26	Denise K Connors	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103556050002	12/22/2010 08:48	Denise K Connors	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103545713001	12/20/2010 13:45	Damary Valentin	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10350196902A	12/17/2010 07:59	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10352658701A	12/18/2010 15:23	Venia B McFadden	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10349113001A	12/15/2010 11:31	Nicole M Kepley	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	22	6.5	7.7		0.8
06192	Benzene	71-43-2	0.1 U	0.1	3.9		0.8
06192	Bromobenzene	108-86-1	0.13 U	0.13	3.9		0.8
06192	Bromochloromethane	74-97-5	0.32 U	0.32	3.9		0.8
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	3.9		0.8
06192	Bromoform	75-25-2	0.39 U	0.39	3.9		0.8
06192	Bromomethane	74-83-9	0.24 U	0.24	3.9		0.8
06192	2-Butanone	78-93-3	3.4 J	1.2	7.7		0.8
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	3.9		0.8
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	3.9		0.8
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	3.9		0.8
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	3.9		0.8
06192	Chlorobenzene	108-90-7	0.11 U	0.11	3.9		0.8
06192	Chloroethane	75-00-3	0.13 U	0.13	3.9		0.8
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.29 U	0.29	3.9		0.8
06192	Chloroform	67-66-3	0.12 U	0.12	3.9		0.8
06192	Chloromethane	74-87-3	0.32 U	0.32	3.9		0.8
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	3.9		0.8
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	3.9		0.8
06192	Chlorotrifluoroethene	79-38-9	0.48 U	0.48	4.8		0.8
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.68 U	0.68	3.9		0.8
06192	Dibromochloromethane	124-48-1	0.19 U	0.19	3.9		0.8
06192	1,2-Dibromoethane	106-93-4	0.16 U	0.16	3.9		0.8
06192	Dibromomethane	74-95-3	0.23 U	0.23	3.9		0.8
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	3.9		0.8
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	3.9		0.8
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	3.9		0.8
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	3.9		0.8
06192	1,1-Dichloroethane	75-34-3	0.1 U	0.1	3.9		0.8
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	3.9		0.8
06192	1,1-Dichloroethene	75-35-4	0.38 U	0.38	3.9		0.8
06192	cis-1,2-Dichloroethene	156-59-2	0.18 U	0.18	3.9		0.8
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	3.9		0.8
06192	1,2-Dichloropropane	78-87-5	0.16 U	0.16	3.9		0.8
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	3.9		0.8
06192	2,2-Dichloropropane	594-20-7	0.16 U	0.16	3.9		0.8
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	3.9		0.8
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	3.9		0.8
06192	trans-1,3-Dichloropropene	10061-02-6	0.16 U	0.16	3.9		0.8
06192	Ethylbenzene	100-41-4	0.06 U	0.06	3.9		0.8
06192	Freon 113	76-13-1	0.11 U	0.11	3.9		0.8
06192	Freon 133a	75-88-7	0.48 U	0.48	4.8		0.8
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	3.9		0.8
06192	2-Hexanone	591-78-6	1.5 U	1.5	7.7		0.8
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	3.9		0.8
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	3.9		0.8
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20 U	0.20	3.9		0.8
06192	4-Methyl-2-pentanone	108-10-1	0.38 U	0.38	7.7		0.8
06192	Methylene Chloride	75-09-2	1.1 J	0.23	3.9		0.8
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	3.9		0.8

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Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.1 U	0.1	3.9		0.8
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	3.9		0.8
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22 U	0.22	3.9		0.8
06192	Tetrachloroethene	127-18-4	0.19 U	0.19	3.9		0.8
06192	Toluene	108-88-3	0.08 J	0.08	3.9		0.8
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	3.9		0.8
06192	1,2,4-Trichlorobenzene	120-82-1	0.17 U	0.17	3.9		0.8
06192	1,1,1-Trichloroethane	71-55-6	0.19 U	0.19	3.9		0.8
06192	1,1,2-Trichloroethane	79-00-5	0.26 U	0.26	3.9		0.8
06192	Trichloroethene	79-01-6	0.15 U	0.15	3.9		0.8
06192	Trichlorofluoromethane	75-69-4	0.28 U	0.28	3.9		0.8
06192	1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	3.9		0.8
06192	1,2,4-Trimethylbenzene	95-63-6	0.39 U	0.39	3.9		0.8
06192	1,3,5-Trimethylbenzene	108-67-8	0.1 U	0.1	3.9		0.8
06192	Vinyl Chloride	75-01-4	0.19 U	0.19	3.9		0.8
06192	m+p-Xylene	179601-23-1	0.16 U	0.16	3.9		0.8
06192	o-Xylene	95-47-6	0.16 U	0.16	3.9		0.8
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.7 U	4.7	14		19.47
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	80.4	20.0	40.1		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	600		1
04688	Benzidine	92-87-5	1,400	U 1,400	4,000		1
04688	Benzoic acid	65-85-0	200	U 200	600		1
04688	Benzyl alcohol	100-51-6	200	U 200	600		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200		1
04688	Carbazole	86-74-8	20	U 20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40	U 40	200		1
04688	4-Chloroaniline	106-47-8	80	U 80	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200		1
04688	2-Chlorophenol	95-57-8	20	U 20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U 40	200		1
04688	Dibenzofuran	132-64-9	20	U 20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	400		1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200		1
04688	2,4-Dimethylphenol	105-67-9	40	U 40	200		1
04688	3,5-Dimethylphenol	108-68-9	40	U 40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	600		1
04688	2,4-Dinitrophenol	51-28-5	800	U 800	2,400		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	40	U 40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200		1
04688	Hexachlorobenzene	118-74-1	20	U 20	200		1
04688	Hexachlorobutadiene	87-68-3	80	U 80	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	600		1
04688	Hexachloroethane	67-72-1	20	U 20	200		1
04688	Isophorone	78-59-1	20	U 20	200		1
04688	2-Methylphenol	95-48-7	40	U 40	200		1
04688	4-Methylphenol	106-44-5	40	U 40	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U 20	200		1
04688	3-Nitroaniline	99-09-2	40	U 40	200		1
04688	4-Nitroaniline	100-01-6	80	U 80	200		1
04688	Nitrobenzene	98-95-3	20	U 20	200		1
04688	2-Nitrophenol	88-75-5	20	U 20	200		1
04688	4-Nitrophenol	100-02-7	200	U 200	600		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U 200	600		1
04688	Phenol	108-95-2	20	U 20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U 20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U 40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U 40	200		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.80	U 0.80	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U 0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U 0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.80	U 0.80	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.80	U 0.80	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.80	U 0.80	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U 0.80	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U 0.80	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U 7.2	22		1
10138	Di-n-butylphthalate	84-74-2	7.2	U 7.2	22		1
10138	Chrysene	218-01-9	0.53	J 0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U 0.80	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U 7.2	22		1
10138	Dimethylphthalate	131-11-3	7.2	U 7.2	22		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J 7.2	22		1
10138	Fluoranthene	206-44-0	0.80	U 0.80	2.0		1
10138	Fluorene	86-73-7	0.80	U 0.80	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U 0.80	2.0		1

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Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
			ug/kg	ug/kg	ug/kg	ug/kg	
10138	1-Methylnaphthalene	90-12-0	0.80 U	0.80	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.80 U	0.80	2.0		1
10138	Naphthalene	91-20-3	0.80 U	0.80	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.80 U	0.80	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2 U	7.2	22		1
10138	Phenanthrene	85-01-8	0.80 U	0.80	2.0		1
10138	Pyrene	129-00-0	0.80 U	0.80	2.0		1
The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
GC Volatiles TPH GRO SW-846 8015B mod							
			mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.0		21.44
Explosives SW-846 8330A							
			ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	90	U 90	180	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	60	U 60	180	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U 120	360	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U 120	360	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	60	U 60	180	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	60	U 60	180	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	60	U 60	180	1000000 0	1
10132	HMX	2691-41-0	150	U 150	450	1000000 0	1
10132	Nitrobenzene	98-95-3	60	U 60	180	1000000 0	1
10132	Nitroglycerin	55-63-0	1,200	U 1,200	3,600	1000000 0	1
10132	2-Nitrotoluene	88-72-2	120	U 120	180	1000000 0	1
10132	3-Nitrotoluene	99-08-1	150	U 150	180	1000000 0	1
10132	4-Nitrotoluene	99-99-0	120	U 120	180	1000000 0	1
10132	PETN	78-11-5	1,200	U 1,200	3,600	1000000 0	1
10132	RDX	121-82-4	75	U 75	180	1000000 0	1
10132	Tetryl	479-45-8	92	U 92	180	1000000 0	1

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Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Reported: 01/19/2011 11:07

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives							
10132	1,3,5-Trinitrobenzene	99-35-4	60	U 60	180	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	60	U 60	180	10000000	1
HPLC Organics							
04173	17a Formaldehyde by	50-00-0	2,600	720	1,800		1
Pesticides/PCBs							
10225	Aroclor 5432	63496-31-1	1.2	U 1.2	4.0		1
10225	Aroclor 5442	12642-23-8	1.2	U 1.2	4.0		1
10225	Aroclor 5460	11126-42-4	1.2	U 1.2	4.0		1
10225	PCB-1016	12674-11-2	0.40	U 0.40	2.0		1
10225	PCB-1221	11104-28-2	0.60	U 0.60	2.0		1
10225	PCB-1232	11141-16-5	0.63	U 0.63	2.0		1
10225	PCB-1242	53469-21-9	0.60	U 0.60	2.0		1
10225	PCB-1248	12672-29-6	0.40	U 0.40	2.0		1
10225	PCB-1254	11097-69-1	0.66	J 0.40	2.0		1
10225	PCB-1260	11096-82-5	0.40	U 0.40	2.0		1
10225	PCB-1262	37324-23-5	0.40	U 0.40	2.0		1
10225	PCB-1268	11100-14-4	0.40	U 0.40	2.0		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH							
10199	EFH (C12-C14)	n.a.	0.48	U 0.48	1.4		1
10199	EFH (C15-C20)	n.a.	0.48	U 0.48	1.4		1
10199	EFH (C21-C30)	n.a.	0.48	U 0.48	1.4		1
10199	EFH (C30 - C40)	n.a.	0.48	U 0.48	1.4		1
10199	EFH (C8-C11)	n.a.	0.48	U 0.48	1.4		1
GC Miscellaneous							
10501	Ethanol	64-17-5	120	U 120	600		1
10501	Isopropanol	67-63-0	120	U 120	600		1
10501	Methanol	67-56-1	620	120	600		1
GC Miscellaneous							
08283	Diethylene glycol	111-46-6	6.0	U 6.0	15		1
08283	Ethylene glycol	107-21-1	6.0	U 6.0	15		1
08283	Propylene glycol	57-55-6	6.0	U 6.0	15		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Terphenyls							
10318	m-Terphenyl	92-06-8	1.8	U 1.8	4.2		1
10318	o-Terphenyl	84-15-1	1.8	U 1.8	4.2		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls							
10318	p-Terphenyl	92-94-4	1.8	U 1.8	4.2	mg/kg	1
Metals							
SW-846 6010B							
01643	Aluminum	7429-90-5	33,600	5.99	23.8	mg/kg	1
07914	Boron	7440-42-8	8.24	1.06	5.95	mg/kg	1
01650	Calcium	7440-70-2	26,200	7.29	23.8	mg/kg	1
01654	Iron	7439-89-6	34,100	11.2	47.6	mg/kg	2
01656	Lithium	7439-93-2	28.1	0.26	2.4	mg/kg	1
01657	Magnesium	7439-95-4	8,130	3.02	11.9	mg/kg	1
06958	Manganese	7439-96-5	402	0.0928	0.595	mg/kg	1
10145	Phosphorus	7723-14-0	468	0.666	11.9	mg/kg	1
01662	Potassium	7440-09-7	4,790	21.4	59.5	mg/kg	1
01667	Sodium	7440-23-5	256	44.4	119	mg/kg	1
07968	Strontium	7440-24-6	51.3	0.0738	0.595	mg/kg	1
06969	Tin	7440-31-5	2.81	J 1.19	11.9	mg/kg	1
06970	Titanium	7440-32-6	1,610	0.452	1.19	mg/kg	1
10146	Zirconium	7440-67-7	4.89	J 1.00	5.95	mg/kg	1
SW-846 6020							
06124	Antimony	7440-36-0	0.366	0.0700	0.233	mg/kg	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.20	0.0700	0.467	mg/kg	2
06126	Barium	7440-39-3	183	0.126	0.467	mg/kg	2
06127	Beryllium	7440-41-7	0.889	0.0187	0.117	mg/kg	2
06128	Cadmium	7440-43-9	0.454	0.0420	0.117	mg/kg	2
06131	Chromium	7440-47-3	43.0	0.140	0.467	mg/kg	2
06132	Cobalt	7440-48-4	10.0	0.0233	0.117	mg/kg	2
06133	Copper	7440-50-8	17.9	0.0770	0.467	mg/kg	2
06135	Lead	7439-92-1	14.0	0.0121	0.233	mg/kg	2
06138	Molybdenum	7439-98-7	0.801	0.0583	0.117	mg/kg	2
06139	Nickel	7440-02-0	20.3	0.117	0.467	mg/kg	2
06141	Selenium	7782-49-2	0.252	J 0.0467	0.467	mg/kg	2
06142	Silver	7440-22-4	0.0645	J 0.0140	0.117	mg/kg	2
06145	Thallium	7440-28-0	0.439	0.0350	0.117	mg/kg	2
06148	Vanadium	7440-62-2	79.2	0.0257	0.117	mg/kg	2
06149	Zinc	7440-66-6	96.1	0.653	3.50	mg/kg	2
SW-846 7471A							
00159	Mercury	7439-97-6	0.0068	J 0.0034	0.120	mg/kg	1
Wet Chemistry							
EPA 300.0							
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	0.96	1.2	mg/kg	1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.96	U 0.96	1.8	mg/kg	1
EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8	U 10.8	36.1	ug/kg	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	1.8	0.24	1.2	mg/kg	1
SW-846 9012B							
05895	21a Cyanide by 9012B	57-12-5	0.21 U	0.21	0.58	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	438	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	8.15	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	16.8	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-004-SA5C-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 20:31	Laura M Krieger	0.8
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 12:41	Jason M Long	19.47
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035023323	12/16/2010 12:09	Stephanie A Sanchez	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035023323	12/16/2010 12:07	Stephanie A Sanchez	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035023323	12/16/2010 12:07	Stephanie A Sanchez	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035023323	12/16/2010 12:09	Stephanie A Sanchez	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10361SLB026	01/05/2011 19:32	Timothy J Trees	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3905 SDG#: DE039-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 13:46	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 20:25	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10361SLB026	12/27/2010 08:15	Joseph S Feister	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34B	12/17/2010 14:49	Elizabeth J Marin	21.44
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035023324	12/16/2010 12:10	Stephanie A Sanchez	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 10:58	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 01:02	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 21:49	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103570006A	12/27/2010 13:15	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/21/2010 00:19	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103510010A	12/21/2010 20:04	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550027A	12/24/2010 00:29	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	103570006A	12/23/2010 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550027A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103510010A	12/17/2010 12:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 20:46	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3905 SDG#: DE039-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 13:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 13:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 13:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:13	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 00:56	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11007007201A	01/08/2011 00:56	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 16:23	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 14:22	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:25	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.4 U	7.4	8.8		0.92
06192	Benzene	71-43-2	0.11 U	0.11	4.4		0.92
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.4		0.92
06192	Bromochloromethane	74-97-5	0.36 U	0.36	4.4		0.92
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.4		0.92
06192	Bromoform	75-25-2	0.44 U	0.44	4.4		0.92
06192	Bromomethane	74-83-9	0.28 U	0.28	4.4		0.92
06192	2-Butanone	78-93-3	1.3 U	1.3	8.8		0.92
06192	n-Butylbenzene	104-51-8	0.13 U	0.13	4.4		0.92
06192	sec-Butylbenzene	135-98-8	0.07 U	0.07	4.4		0.92
06192	tert-Butylbenzene	98-06-6	0.18 U	0.18	4.4		0.92
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.4		0.92
06192	Chlorobenzene	108-90-7	0.12 U	0.12	4.4		0.92
06192	Chloroethane	75-00-3	0.14 U	0.14	4.4		0.92
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.33 U	0.33	4.4		0.92
06192	Chloroform	67-66-3	0.13 U	0.13	4.4		0.92
06192	Chloromethane	74-87-3	0.36 U	0.36	4.4		0.92
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.4		0.92
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.4		0.92
06192	Chlorotrifluoroethene	79-38-9	0.55 U	0.55	5.5		0.92
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.77 U	0.77	4.4		0.92
06192	Dibromochloromethane	124-48-1	0.22 U	0.22	4.4		0.92
06192	1,2-Dibromoethane	106-93-4	0.19 U	0.19	4.4		0.92
06192	Dibromomethane	74-95-3	0.26 U	0.26	4.4		0.92
06192	1,2-Dichlorobenzene	95-50-1	0.1 U	0.1	4.4		0.92
06192	1,3-Dichlorobenzene	541-73-1	0.13 U	0.13	4.4		0.92
06192	1,4-Dichlorobenzene	106-46-7	0.18 U	0.18	4.4		0.92
06192	Dichlorodifluoromethane	75-71-8	0.13 U	0.13	4.4		0.92
06192	1,1-Dichloroethane	75-34-3	0.11 U	0.11	4.4		0.92
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.4		0.92
06192	1,1-Dichloroethene	75-35-4	0.43 U	0.43	4.4		0.92
06192	cis-1,2-Dichloroethene	156-59-2	0.21 U	0.21	4.4		0.92
06192	trans-1,2-Dichloroethene	156-60-5	0.13 U	0.13	4.4		0.92
06192	1,2-Dichloropropane	78-87-5	0.19 U	0.19	4.4		0.92
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.4		0.92
06192	2,2-Dichloropropane	594-20-7	0.19 U	0.19	4.4		0.92
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.4		0.92
06192	cis-1,3-Dichloropropene	10061-01-5	0.18 U	0.18	4.4		0.92
06192	trans-1,3-Dichloropropene	10061-02-6	0.19 U	0.19	4.4		0.92
06192	Ethylbenzene	100-41-4	0.07 U	0.07	4.4		0.92
06192	Freon 113	76-13-1	0.12 U	0.12	4.4		0.92
06192	Freon 133a	75-88-7	0.55 U	0.55	5.5		0.92
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.4		0.92
06192	2-Hexanone	591-78-6	1.8 U	1.8	8.8		0.92
06192	Isopropylbenzene	98-82-8	0.07 U	0.07	4.4		0.92
06192	p-Isopropyltoluene	99-87-6	0.12 U	0.12	4.4		0.92
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.23 U	0.23	4.4		0.92
06192	4-Methyl-2-pentanone	108-10-1	0.43 U	0.43	8.8		0.92
06192	Methylene Chloride	75-09-2	0.97 J	0.26	4.4		0.92
06192	n-Propylbenzene	103-65-1	0.08 U	0.08	4.4		0.92

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.11 U	0.11	4.4		0.92
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12 U	0.12	4.4		0.92
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.25 U	0.25	4.4		0.92
06192	Tetrachloroethene	127-18-4	0.22 U	0.22	4.4		0.92
06192	Toluene	108-88-3	0.09 J	0.09	4.4		0.92
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.4		0.92
06192	1,2,4-Trichlorobenzene	120-82-1	0.20 U	0.20	4.4		0.92
06192	1,1,1-Trichloroethane	71-55-6	0.22 U	0.22	4.4		0.92
06192	1,1,2-Trichloroethane	79-00-5	0.30 U	0.30	4.4		0.92
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.4		0.92
06192	Trichlorofluoromethane	75-69-4	0.32 U	0.32	4.4		0.92
06192	1,2,3-Trichloropropane	96-18-4	0.36 U	0.36	4.4		0.92
06192	1,2,4-Trimethylbenzene	95-63-6	0.44 U	0.44	4.4		0.92
06192	1,3,5-Trimethylbenzene	108-67-8	0.11 U	0.11	4.4		0.92
06192	Vinyl Chloride	75-01-4	0.22 U	0.22	4.4		0.92
06192	m+p-Xylene	179601-23-1	0.19 U	0.19	4.4		0.92
06192	o-Xylene	95-47-6	0.19 U	0.19	4.4		0.92
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.6 U	4.6	14		19.08
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	66.2	19.9	39.8		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	600		1
04688	Benzidine	92-87-5	1,400	U 1,400	4,000		1
04688	Benzoic acid	65-85-0	200	U 200	600		1
04688	Benzyl alcohol	100-51-6	200	U 200	600		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200		1
04688	Carbazole	86-74-8	20	U 20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40	U 40	200		1
04688	4-Chloroaniline	106-47-8	80	U 80	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200		1
04688	2-Chlorophenol	95-57-8	20	U 20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U 40	200		1
04688	Dibenzofuran	132-64-9	20	U 20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	400		1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200		1
04688	2,4-Dimethylphenol	105-67-9	40	U 40	200		1
04688	3,5-Dimethylphenol	108-68-9	40	U 40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	600		1
04688	2,4-Dinitrophenol	51-28-5	800	U 800	2,400		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	40	U 40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200		1
04688	Hexachlorobenzene	118-74-1	20	U 20	200		1
04688	Hexachlorobutadiene	87-68-3	80	U 80	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	600		1
04688	Hexachloroethane	67-72-1	20	U 20	200		1
04688	Isophorone	78-59-1	20	U 20	200		1
04688	2-Methylphenol	95-48-7	40	U 40	200		1
04688	4-Methylphenol	106-44-5	40	U 40	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U 20	200		1
04688	3-Nitroaniline	99-09-2	40	U 40	200		1
04688	4-Nitroaniline	100-01-6	80	U 80	200		1
04688	Nitrobenzene	98-95-3	20	U 20	200		1
04688	2-Nitrophenol	88-75-5	20	U 20	200		1
04688	4-Nitrophenol	100-02-7	200	U 200	600		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U 200	600		1
04688	Phenol	108-95-2	20	U 20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U 20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U 40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U 40	200		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.80	U 0.80	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U 0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U 0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.80	U 0.80	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.80	U 0.80	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.80	U 0.80	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U 0.80	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U 0.80	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U 7.2	21		1
10138	Di-n-butylphthalate	84-74-2	7.2	U 7.2	21		1
10138	Chrysene	218-01-9	0.50	J 0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U 0.80	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U 7.2	21		1
10138	Dimethylphthalate	131-11-3	7.2	U 7.2	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.3	J 7.2	21		1
10138	Fluoranthene	206-44-0	0.80	U 0.80	2.0		1
10138	Fluorene	86-73-7	0.80	U 0.80	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U 0.80	2.0		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
			ug/kg	ug/kg	ug/kg	ug/kg	
10138	1-Methylnaphthalene	90-12-0	0.80 U	0.80	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.80 U	0.80	2.0		1
10138	Naphthalene	91-20-3	0.80 U	0.80	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.80 U	0.80	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2 U	7.2	21		1
10138	Phenanthrene	85-01-8	0.80 U	0.80	2.0		1
10138	Pyrene	129-00-0	0.80 U	0.80	2.0		1
The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
GC Volatiles TPH GRO SW-846 8015B mod							
			mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1		20.36
Explosives SW-846 8330A							
			ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	89	U 89	180	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	60	U 60	180	1000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U 120	360	1000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U 120	360	1000000	1
10132	1,3-Dinitrobenzene	99-65-0	60	U 60	180	1000000	1
10132	2,4-Dinitrotoluene	121-14-2	60	U 60	180	1000000	1
10132	2,6-Dinitrotoluene	606-20-2	60	U 60	180	1000000	1
10132	HMX	2691-41-0	150	U 150	450	1000000	1
10132	Nitrobenzene	98-95-3	60	U 60	180	1000000	1
10132	Nitroglycerin	55-63-0	1,200	U 1,200	3,600	1000000	1
10132	2-Nitrotoluene	88-72-2	120	U 120	180	1000000	1
10132	3-Nitrotoluene	99-08-1	150	U 150	180	1000000	1
10132	4-Nitrotoluene	99-99-0	120	U 120	180	1000000	1
10132	PETN	78-11-5	1,200	U 1,200	3,600	1000000	1
10132	RDX	121-82-4	75	U 75	180	1000000	1
10132	Tetryl	479-45-8	91	U 91	180	1000000	1

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Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
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Project Name: SSFL Area IV Collocated Soil Sampling

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E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	60	U 60	180	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	60	U 60	180	10000000	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by 8315A	50-00-0	720	U 720	1,800		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2	U 1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2	U 1.2	3.9		1
10225	Aroclor 5460	11126-42-4	1.2	U 1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39	U 0.39	2.0		1
10225	PCB-1221	11104-28-2	0.60	U 0.60	2.0		1
10225	PCB-1232	11141-16-5	0.62	U 0.62	2.0		1
10225	PCB-1242	53469-21-9	0.60	U 0.60	2.0		1
10225	PCB-1248	12672-29-6	0.39	U 0.39	2.0		1
10225	PCB-1254	11097-69-1	0.39	U 0.39	2.0		1
10225	PCB-1260	11096-82-5	0.39	U 0.39	2.0		1
10225	PCB-1262	37324-23-5	0.39	U 0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39	U 0.39	2.0		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.48	U 0.48	1.4		1
10199	EFH (C15-C20)	n.a.	0.48	U 0.48	1.4		1
10199	EFH (C21-C30)	n.a.	0.48	U 0.48	1.4		1
10199	EFH (C30 - C40)	n.a.	1.1	J 0.48	1.4		1
10199	EFH (C8-C11)	n.a.	0.48	U 0.48	1.4		1
The beginning CCV was outside method criteria. Due to limited extract volume a re-analysis could not be performed; therefore, the data is reported.							
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120	U 120	600		1
10501	Isopropanol	67-63-0	120	U 120	600		1
10501	Methanol	67-56-1	410	J 120	600		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	6.0	U 6.0	15		1
08283	Ethylene glycol	107-21-1	6.0	U 6.0	15		1
08283	Propylene glycol	57-55-6	6.0	U 6.0	15		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.8 U	1.8	4.2		1
10318	o-Terphenyl	84-15-1	1.8 U	1.8	4.2		1
10318	p-Terphenyl	92-94-4	1.8 U	1.8	4.2		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	29,700	5.77	22.9		1
07914	Boron	7440-42-8	4.55 J	1.02	5.74		1
01650	Calcium	7440-70-2	16,000	7.03	22.9		1
01654	Iron	7439-89-6	30,600	10.8	45.9		2
01656	Lithium	7439-93-2	28.2	0.25	2.3		1
01657	Magnesium	7439-95-4	6,590	2.91	11.5		1
06958	Manganese	7439-96-5	370	0.0895	0.574		1
10145	Phosphorus	7723-14-0	311	0.643	11.5		1
01662	Potassium	7440-09-7	3,660	20.7	57.4		1
01667	Sodium	7440-23-5	182	42.8	115		1
07968	Strontium	7440-24-6	34.0	0.0711	0.574		1
06969	Tin	7440-31-5	2.90 J	1.15	11.5		1
06970	Titanium	7440-32-6	1,580	0.436	1.15		1
10146	Zirconium	7440-67-7	3.75 J	0.964	5.74		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.318	0.0709	0.236		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.70	0.0709	0.473		2
06126	Barium	7440-39-3	160	0.128	0.473		2
06127	Beryllium	7440-41-7	0.928	0.0189	0.118		2
06128	Cadmium	7440-43-9	0.237	0.0425	0.118		2
06131	Chromium	7440-47-3	39.0	0.142	0.473		2
06132	Cobalt	7440-48-4	9.82	0.0236	0.118		2
06133	Copper	7440-50-8	15.8	0.0780	0.473		2
06135	Lead	7439-92-1	12.5	0.0123	0.236		2
06138	Molybdenum	7439-98-7	0.470	0.0591	0.118		2
06139	Nickel	7440-02-0	17.8	0.118	0.473		2
06141	Selenium	7782-49-2	0.0746 J	0.0473	0.473		2
06142	Silver	7440-22-4	0.0893 J	0.0142	0.118		2
06145	Thallium	7440-28-0	0.422	0.0354	0.118		2
06148	Vanadium	7440-62-2	71.3	0.0260	0.118		2
06149	Zinc	7440-66-6	70.9	0.662	3.54		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0138 J	0.0033	0.115		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.2	0.95	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.6 J	0.95	1.8		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.7 U ug/kg	10.7 ug/kg	35.8 ug/kg	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.24 U mg/kg	0.24 mg/kg	1.2 mg/kg	mg/kg	1
SW-846 9012B							
05895	21a Cyanide by 9012B	57-12-5	0.21 U mg/kg	0.21 mg/kg	0.58 mg/kg	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	426 mV	10.0 mV	10.0 mV	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	8.25 Std. Units	0.0100 Std. Units	0.0100 Std. Units	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	16.2 %	0.50 %	0.50 %	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-004-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 20:54	Laura M Krieger	0.92
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 13:01	Jason M Long	19.08
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035023323	12/16/2010 12:08	Stephanie A Sanchez	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035023323	12/16/2010 12:07	Stephanie A Sanchez	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035023323	12/16/2010 12:07	Stephanie A Sanchez	n.a.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3906 SDG#: DE039-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035023323	12/16/2010 12:08	Stephanie A Sanchez	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10361SLB026	01/05/2011 19:49	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 14:20	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 21:00	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10361SLB026	12/27/2010 08:15	Joseph S Feister	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34B	12/17/2010 15:25	Elizabeth J Marin	20.36
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035023323	12/16/2010 12:08	Stephanie A Sanchez	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 11:40	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 01:12	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 22:08	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103570006A	12/27/2010 13:40	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/21/2010 00:33	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103510010A	12/21/2010 18:28	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550027A	12/24/2010 01:14	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	103570006A	12/23/2010 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550027A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103510010A	12/17/2010 12:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 20:50	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3906 SDG#: DE039-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 13:19	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 13:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 13:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:14	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 01:39	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11007007201A	01/08/2011 01:39	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 17:11	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 14:38	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202B	12/27/2010 20:27	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202B	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3907 SDG#: DE039-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.0 U	7.0	8.4		0.94
06192	Benzene	71-43-2	0.10 U	0.10	4.2		0.94
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.2		0.94
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.2		0.94
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.2		0.94
06192	Bromoform	75-25-2	0.42 U	0.42	4.2		0.94
06192	Bromomethane	74-83-9	0.26 U	0.26	4.2		0.94
06192	2-Butanone	78-93-3	1.3 U	1.3	8.4		0.94
06192	n-Butylbenzene	104-51-8	0.13 U	0.13	4.2		0.94
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.2		0.94
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.2		0.94
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.2		0.94
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.2		0.94
06192	Chloroethane	75-00-3	0.14 U	0.14	4.2		0.94
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.2		0.94
06192	Chloroform	67-66-3	0.13 U	0.13	4.2		0.94
06192	Chloromethane	74-87-3	0.34 U	0.34	4.2		0.94
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.2		0.94
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.2		0.94
06192	Chlorotrifluoroethene	79-38-9	0.52 U	0.52	5.2		0.94
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73 U	0.73	4.2		0.94
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.2		0.94
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.2		0.94
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.2		0.94
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.2		0.94
06192	1,3-Dichlorobenzene	541-73-1	0.13 U	0.13	4.2		0.94
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.2		0.94
06192	Dichlorodifluoromethane	75-71-8	0.13 U	0.13	4.2		0.94
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.2		0.94
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.2		0.94
06192	1,1-Dichloroethene	75-35-4	0.41 U	0.41	4.2		0.94
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.2		0.94
06192	trans-1,2-Dichloroethene	156-60-5	0.13 U	0.13	4.2		0.94
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.2		0.94
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.2		0.94
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.2		0.94
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.2		0.94
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.2		0.94
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.2		0.94
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.2		0.94
06192	Freon 113	76-13-1	0.11 U	0.11	4.2		0.94
06192	Freon 133a	75-88-7	0.52 U	0.52	5.2		0.94
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.2		0.94
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.4		0.94
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.2		0.94
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.2		0.94
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.2		0.94
06192	4-Methyl-2-pentanone	108-10-1	0.41 U	0.41	8.4		0.94
06192	Methylene Chloride	75-09-2	2.8 J	0.25	4.2		0.94
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.2		0.94

*=This limit was used in the evaluation of the final result

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Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3907 SDG#: DE039-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.2		0.94
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.2		0.94
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.2		0.94
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.2		0.94
06192	Toluene	108-88-3	0.09 J	0.08	4.2		0.94
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.2		0.94
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.2		0.94
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.2		0.94
06192	1,1,2-Trichloroethane	79-00-5	0.28 U	0.28	4.2		0.94
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.2		0.94
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.2		0.94
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.2		0.94
06192	1,2,4-Trimethylbenzene	95-63-6	0.42 U	0.42	4.2		0.94
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.2		0.94
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.2		0.94
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.2		0.94
06192	o-Xylene	95-47-6	0.18 U	0.18	4.2		0.94
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.1 U	5.1	15		23.02
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190		1
04688	4-Chloroaniline	106-47-8	74	U 74	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1

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Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3907 SDG#: DE039-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	50	J 19	370		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	74	U 74	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	37	U 37	190		1
04688	4-Methylphenol	106-44-5	37	U 37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	37	U 37	190		1
04688	4-Nitroaniline	100-01-6	74	U 74	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74 U	0.74	1.9		1
10138	Acenaphthylene	208-96-8	0.37 U	0.37	1.9		1
10138	Anthracene	120-12-7	0.37 U	0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.74 U	0.74	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.74 U	0.74	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.74 U	0.74	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.74 U	0.74	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.74 U	0.74	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.7 U	6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7 U	6.7	20		1
10138	Chrysene	218-01-9	0.37 U	0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.74 U	0.74	1.9		1
10138	Diethylphthalate	84-66-2	6.7 U	6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7 U	6.7	20		1
10138	Fluoranthene	206-44-0	0.74 U	0.74	1.9		1
10138	Fluorene	86-73-7	0.74 U	0.74	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74 U	0.74	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.74 U	0.74	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.74 U	0.74	1.9		1
10138	Naphthalene	91-20-3	0.74 U	0.74	1.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3907 SDG#: DE039-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	N-Nitrosodimethylamine	62-75-9	0.74 U	0.74	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7 U	6.7	20		1
10138	Phenanthrene	85-01-8	0.74 U	0.74	1.9		1
10138	Pyrene	129-00-0	0.74 U	0.74	1.9		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Pesticides/PCBs	SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9
10225	PCB-1260	11096-82-5	0.37 U	0.37	1.9
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg
01643	Aluminum	7429-90-5	18,600	5.38	21.4	1
07914	Boron	7440-42-8	2.76 J	0.952	5.35	1
01650	Calcium	7440-70-2	2,770	6.56	21.4	1
01654	Iron	7439-89-6	21,400	5.04	21.4	1
01656	Lithium	7439-93-2	19.6	0.24	2.1	1
01657	Magnesium	7439-95-4	3,570	2.72	10.7	1
06958	Manganese	7439-96-5	143	0.0834	0.535	1
10145	Phosphorus	7723-14-0	131	0.599	10.7	1
01662	Potassium	7440-09-7	1,450	19.3	53.5	1
01667	Sodium	7440-23-5	386	39.9	107	1
07968	Strontium	7440-24-6	26.3	0.0663	0.535	1
06969	Tin	7440-31-5	2.61 J	1.07	10.7	1
06970	Titanium	7440-32-6	1,250	0.406	1.07	1
10146	Zirconium	7440-67-7	2.03 J	0.898	5.35	1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg
06124	Antimony	7440-36-0	0.169 J	0.0661	0.220	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	6.88	0.0661	0.441	2
06126	Barium	7440-39-3	132	0.119	0.441	2
06127	Beryllium	7440-41-7	0.666	0.0176	0.110	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3907 SDG#: DE039-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06128	Cadmium	7440-43-9	0.0533 J	0.0396	0.110		2
06131	Chromium	7440-47-3	24.6	0.132	0.441		2
06132	Cobalt	7440-48-4	4.65	0.0220	0.110		2
06133	Copper	7440-50-8	8.83	0.0727	0.441		2
06135	Lead	7439-92-1	8.73	0.0115	0.220		2
06138	Molybdenum	7439-98-7	0.412	0.0551	0.110		2
06139	Nickel	7440-02-0	11.0	0.110	0.441		2
06141	Selenium	7782-49-2	0.0532 J	0.0441	0.441		2
06142	Silver	7440-22-4	0.0480 J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.352	0.0330	0.110		2
06148	Vanadium	7440-62-2	50.1	0.0242	0.110		2
06149	Zinc	7440-66-6	49.0	0.617	3.30		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0063 J	0.0032	0.111		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.0	0.89	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.0 U	10.0	33.4		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	381	10.0	10.0		1
		The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.08	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	10.1	0.50	0.50		1
		"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3907 SDG#: DE039-07

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-140-SA5C-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 21:16	Laura M Krieger	0.94
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 18:19	Jason M Long	23.02
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034923319	12/15/2010 22:39	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 14:55	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 21:35	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:38	Lois E Hiltz	n.a.
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 22:26	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 12:33	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3907 SDG#: DE039-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:33	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:33	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:15	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 01:53	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 17:35	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 14:54	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3908 SDG#: DE039-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U 760	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3908 SDG#: DE039-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U 0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U 0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	1.0	J 0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U 0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U 0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21		1
10138	Chrysene	218-01-9	1.1	J 0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U 0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U 6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U 6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J 6.9	21		1
10138	Fluoranthene	206-44-0	1.2	J 0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U 0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U 0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U 0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U 0.76	1.9		1
10138	Naphthalene	91-20-3	1.5	J 0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U 0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U 6.9	21		1
10138	Phenanthrene	85-01-8	1.5	J 0.76	1.9		1
10138	Pyrene	129-00-0	0.95	J 0.76	1.9		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.4	U 1.4	4.1
10401	Dalapon	75-99-0	5.0	U 5.0	10
10401	2,4-DB	94-82-6	11	U 11	11
10401	Dicamba	1918-00-9	1.0	J 0.46	1.4
10401	Dinoseb	88-85-7	0.92	U 0.92	2.8
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U 0.92	1.9
10401	MCPA	94-74-6	87	U 87	290
10401	MCP (Mecoprop)	93-65-2	86	U 86	290
10401	2,4,5-T	93-76-5	0.094	U 0.094	0.19
10401	2,4,5-TP	93-72-1	0.086	U 0.086	0.19

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3908 SDG#: DE039-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable.							
Perchlorate		SW-846 6850 1/2007	ug/kg	ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4 U	2.4	5.7		1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.38 U	0.38	0.95		5
01363	Alpha BHC	319-84-6	0.19 U	0.19	0.95		5
01363	Beta BHC	319-85-7	0.34 U	0.34	0.95		5
01363	Gamma BHC - Lindane	58-89-9	0.19 U	0.19	0.95		5
01363	Chlordane	57-74-9	4.6 U	4.6	19		5
01363	p,p-DDD	72-54-8	0.64 U	0.64	1.9		5
01363	p,p-DDE	72-55-9	0.68 U	0.68	1.9		5
01363	p,p-DDT	50-29-3	1.9 U	1.9	1.9		5
01363	Delta BHC	319-86-8	0.93 J	0.21	0.95		5
01363	Dieldrin	60-57-1	0.65 U	0.65	1.9		5
01363	Endosulfan I	959-98-8	0.25 U	0.25	0.95		5
01363	Endosulfan II	33213-65-9	0.38 U	0.38	1.9		5
01363	Endosulfan Sulfate	1031-07-8	0.94 U	0.94	1.9		5
01363	Endrin	72-20-8	0.38 U	0.38	1.9		5
01363	Endrin Aldehyde	7421-93-4	0.99 U	0.99	1.9		5
01363	Endrin Ketone	53494-70-5	0.38 U	0.38	1.9		5
01363	Heptachlor	76-44-8	0.39 J	0.34	0.95		5
01363	Heptachlor Epoxide	1024-57-3	0.62 U	0.62	0.95		5
01363	Methoxychlor	72-43-5	3.1 U	3.1	9.5		5
01363	Mirex	2385-85-5	2.5 U	2.5	2.5		5
01363	Toxaphene	8001-35-2	13 U	13	38		5

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	3.1 J	1.1	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.57 U	0.57	1.9	1
10225	PCB-1232	11141-16-5	0.60 U	0.60	1.9	1
10225	PCB-1242	53469-21-9	0.57 U	0.57	1.9	1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9	1
10225	PCB-1254	11097-69-1	2.4	0.38	1.9	1
10225	PCB-1260	11096-82-5	1.5 J	0.38	1.9	1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9	1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9	1

The stated QC limits are advisory only until sufficient data points

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3908 SDG#: DE039-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
can be obtained to calculate statistical limits.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,500	5.66	22.5		1
07914	Boron	7440-42-8	3.73 J	1.00	5.62		1
01650	Calcium	7440-70-2	3,960	6.89	22.5		1
01654	Iron	7439-89-6	22,600	5.30	22.5		1
01656	Lithium	7439-93-2	24.5	0.25	2.2		1
01657	Magnesium	7439-95-4	5,470	2.86	11.2		1
06958	Manganese	7439-96-5	309	0.0877	0.562		1
10145	Phosphorus	7723-14-0	434	0.630	11.2		1
01662	Potassium	7440-09-7	3,150	20.2	56.2		1
01667	Sodium	7440-23-5	68.9 J	41.9	112		1
07968	Strontium	7440-24-6	15.2	0.0697	0.562		1
06969	Tin	7440-31-5	2.66 J	1.12	11.2		1
06970	Titanium	7440-32-6	1,350	0.427	1.12		1
10146	Zirconium	7440-67-7	1.51 J	0.944	5.62		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.194 J	0.0668	0.223		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.96	0.0668	0.445		2
06126	Barium	7440-39-3	99.6	0.120	0.445		2
06127	Beryllium	7440-41-7	0.455	0.0178	0.111		2
06128	Cadmium	7440-43-9	0.251	0.0401	0.111		2
06131	Chromium	7440-47-3	21.8	0.134	0.445		2
06132	Cobalt	7440-48-4	7.26	0.0223	0.111		2
06133	Copper	7440-50-8	10.3	0.0735	0.445		2
06135	Lead	7439-92-1	16.7	0.0116	0.223		2
06138	Molybdenum	7439-98-7	0.570	0.0557	0.111		2
06139	Nickel	7440-02-0	14.2	0.111	0.445		2
06141	Selenium	7782-49-2	0.206 J	0.0445	0.445		2
06142	Silver	7440-22-4	0.0600 J	0.0134	0.111		2
06145	Thallium	7440-28-0	0.300	0.0334	0.111		2
06148	Vanadium	7440-62-2	48.1	0.0245	0.111		2
06149	Zinc	7440-66-6	82.8	0.623	3.34		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0121 J	0.0033	0.114		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.92	1.1		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.4		1
SW-846 7199							
			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.1		1

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Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3908 SDG#: DE039-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	463	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.78	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	12.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 15:30	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 22:09	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 15:15	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 17:51	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103500020A	12/21/2010 18:03	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 20:49	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 22:45	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

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Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

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14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3908 SDG#: DE039-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103500020A	12/17/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 12:36	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:36	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:36	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:16	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 02:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 18:00	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 15:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3908 SDG#: DE039-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3909 SDG#: DE039-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190		1
04688	4-Chloroaniline	106-47-8	75	U 75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	750	U 750	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	37	U 37	190		1
04688	4-Methylphenol	106-44-5	37	U 37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	37	U 37	190		1
04688	4-Nitroaniline	100-01-6	75	U 75	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenol	108-95-2	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3909 SDG#: DE039-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U 0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.9		1
10138	Anthracene	120-12-7	0.37	U 0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.75	U 0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.75	U 0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	1.3	J 0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U 0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U 0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.7	U 6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7	U 6.7	20		1
10138	Chrysene	218-01-9	1.4	J 0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U 0.75	1.9		1
10138	Diethylphthalate	84-66-2	6.7	U 6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U 6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	8.4	J 6.7	20		1
10138	Fluoranthene	206-44-0	1.1	J 0.75	1.9		1
10138	Fluorene	86-73-7	0.75	U 0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U 0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.75	U 0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.75	U 0.75	1.9		1
10138	Naphthalene	91-20-3	1.6	J 0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U 0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7	U 6.7	20		1
10138	Phenanthrene	85-01-8	1.6	J 0.75	1.9		1
10138	Pyrene	129-00-0	1.1	J 0.75	1.9		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	4.0
10401	Dalapon	75-99-0	4.9	U 4.9	10
10401	2,4-DB	94-82-6	14	0.70	1.9
10401	Dicamba	1918-00-9	0.69	J 0.45	1.3
10401	Dinoseb	88-85-7	0.90	U 0.90	2.7
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U 0.90	1.9
10401	MCPA	94-74-6	85	U 85	280
10401	MCPP (Mecoprop)	93-65-2	84	U 84	280
10401	2,4,5-T	93-76-5	0.092	U 0.092	0.19
10401	2,4,5-TP	93-72-1	0.084	U 0.084	0.19

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3909 SDG#: DE039-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.37 U	0.37	0.93		5
01363	Alpha BHC	319-84-6	0.19 U	0.19	0.93		5
01363	Beta BHC	319-85-7	0.34 U	0.34	0.93		5
01363	Gamma BHC - Lindane	58-89-9	0.19 U	0.19	0.93		5
01363	Chlordane	57-74-9	4.5 U	4.5	19		5
01363	p,p-DDD	72-54-8	0.43 U	0.43	1.9		5
01363	p,p-DDE	72-55-9	0.55 U	0.55	1.9		5
01363	p,p-DDT	50-29-3	1.5 U	1.5	1.9		5
01363	Delta BHC	319-86-8	0.26 J	0.20	0.93		5
01363	Dieldrin	60-57-1	0.55 U	0.55	1.9		5
01363	Endosulfan I	959-98-8	0.25 U	0.25	0.93		5
01363	Endosulfan II	33213-65-9	0.40 U	0.40	1.9		5
01363	Endosulfan Sulfate	1031-07-8	0.37 U	0.37	1.9		5
01363	Endrin	72-20-8	0.37 U	0.37	1.9		5
01363	Endrin Aldehyde	7421-93-4	1.3 U	1.3	1.9		5
01363	Endrin Ketone	53494-70-5	0.37 U	0.37	1.9		5
01363	Heptachlor	76-44-8	0.56 J	0.34	0.93		5
01363	Heptachlor Epoxide	1024-57-3	0.19 U	0.19	0.93		5
01363	Methoxychlor	72-43-5	1.9 U	1.9	9.3		5
01363	Mirex	2385-85-5	0.77 U	0.77	1.9		5
01363	Toxaphene	8001-35-2	12 U	12	37		5

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9	1
10225	PCB-1254	11097-69-1	1.4 J	0.37	1.9	1
10225	PCB-1260	11096-82-5	0.70 J	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg
01643	Aluminum	7429-90-5	10,800	5.47	21.8	1
07914	Boron	7440-42-8	4.10 J	0.969	5.44	1
01650	Calcium	7440-70-2	4,000	6.67	21.8	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3909 SDG#: DE039-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals			mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	19,900	5.13	21.8		1
01656	Lithium	7439-93-2	22.7	0.24	2.2		1
01657	Magnesium	7439-95-4	5,070	2.76	10.9		1
06958	Manganese	7439-96-5	297	0.0849	0.544		1
10145	Phosphorus	7723-14-0	405	0.610	10.9		1
01662	Potassium	7440-09-7	3,290	19.6	54.4		1
01667	Sodium	7440-23-5	67.3 J	40.6	109		1
07968	Strontium	7440-24-6	15.5	0.0675	0.544		1
06969	Tin	7440-31-5	2.38 J	1.09	10.9		1
06970	Titanium	7440-32-6	1,250	0.414	1.09		1
10146	Zirconium	7440-67-7	1.16 J	0.914	5.44		1
SW-846 6010B			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.235	0.0666	0.222		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.07	0.0666	0.444		2
06126	Barium	7440-39-3	122	0.120	0.444		2
06127	Beryllium	7440-41-7	0.472	0.0178	0.111		2
06128	Cadmium	7440-43-9	0.216	0.0400	0.111		2
06131	Chromium	7440-47-3	23.2	0.133	0.444		2
06132	Cobalt	7440-48-4	7.05	0.0222	0.111		2
06133	Copper	7440-50-8	10.5	0.0733	0.444		2
06135	Lead	7439-92-1	14.2	0.0115	0.222		2
06138	Molybdenum	7439-98-7	0.678	0.0555	0.111		2
06139	Nickel	7440-02-0	14.0	0.111	0.444		2
06141	Selenium	7782-49-2	0.313 J	0.0444	0.444		2
06142	Silver	7440-22-4	0.0467 J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.357	0.0333	0.111		2
06148	Vanadium	7440-62-2	48.9	0.0244	0.111		2
06149	Zinc	7440-66-6	93.4	0.622	3.33		2
SW-846 7471A			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0082 J	0.0031	0.109		1
Wet Chemistry			mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.90 U	0.90	1.1		1
EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.6		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
ASTM D1498			mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	444	10.0	10.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3909 SDG#: DE039-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.02	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	10.8	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 16:05	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 22:43	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 16:37	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 18:19	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 21:03	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 23:03	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3909 SDG#: DE039-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 12:39	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 17:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:39	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:39	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:17	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 02:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 18:24	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 15:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3910 SDG#: DE039-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	72	U 72	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	72	U 72	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3910 SDG#: DE039-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72 U	0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.72 J	0.36	1.8		1
10138	Anthracene	120-12-7	0.68 J	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.2 J	0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.4 J	0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	4.7	0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.2 J	0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	2.1	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5 U	6.5	19		1
10138	Di-n-butylphthalate	84-74-2	6.5 U	6.5	19		1
10138	Chrysene	218-01-9	5.6	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	19		1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	20	6.5	19		1
10138	Fluoranthene	206-44-0	16	0.72	1.8		1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1 J	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	1.4 J	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	1.6 J	0.72	1.8		1
10138	Naphthalene	91-20-3	2.6	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	19		1
10138	Phenanthrene	85-01-8	16	0.72	1.8		1
10138	Pyrene	129-00-0	10	0.72	1.8		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3 U	1.3	3.9
10401	Dalapon	75-99-0	4.8 U	4.8	9.7
10401	2,4-DB	94-82-6	14 U	14	14
10401	Dicamba	1918-00-9	0.43 U	0.43	1.3
10401	Dinoseb	88-85-7	0.87 U	0.87	2.6
10401	2,4-DP (Dichlorprop)	120-36-5	0.87 U	0.87	1.8
10401	MCPA	94-74-6	1,800	82	270
10401	MCPP (Mecoprop)	93-65-2	81 U	81	270
10401	2,4,5-T	93-76-5	0.38	0.089	0.18
10401	2,4,5-TP	93-72-1	0.84 U	0.84	0.84

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3910 SDG#: DE039-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4,5-TP and 2,4-DB.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.71 U	0.71	1.8		10
01363	Alpha BHC	319-84-6	0.37 U	0.37	1.8		10
01363	Beta BHC	319-85-7	0.65 U	0.65	1.8		10
01363	Gamma BHC - Lindane	58-89-9	2.7	0.37	1.8		10
01363	Chlordane	57-74-9	8.7 U	8.7	37		10
01363	p,p-DDD	72-54-8	0.71 U	0.71	3.7		10
01363	p,p-DDE	72-55-9	0.96 J	0.71	3.7		10
01363	p,p-DDT	50-29-3	1.6 J	0.71	3.7		10
01363	Delta BHC	319-86-8	2.6	0.39	1.8		10
01363	Dieldrin	60-57-1	0.71 U	0.71	3.7		10
01363	Endosulfan I	959-98-8	0.48 U	0.48	1.8		10
01363	Endosulfan II	33213-65-9	0.71 U	0.71	3.7		10
01363	Endosulfan Sulfate	1031-07-8	0.71 U	0.71	3.7		10
01363	Endrin	72-20-8	0.71 U	0.71	3.7		10
01363	Endrin Aldehyde	7421-93-4	1.8 J	0.71	3.7		10
01363	Endrin Ketone	53494-70-5	0.71 U	0.71	3.7		10
01363	Heptachlor	76-44-8	0.65 U	0.65	1.8		10
01363	Heptachlor Epoxide	1024-57-3	0.37 U	0.37	1.8		10
01363	Methoxychlor	72-43-5	3.7 U	3.7	18		10
01363	Mirex	2385-85-5	0.71 U	0.71	3.7		10
01363	Toxaphene	8001-35-2	24 U	24	71		10

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	22 U	22	71	20
10225	Aroclor 5442	12642-23-8	22 U	22	71	20
10225	Aroclor 5460	11126-42-4	22 U	22	71	20
10225	PCB-1016	12674-11-2	7.1 U	7.1	37	20
10225	PCB-1221	11104-28-2	11 U	11	37	20
10225	PCB-1232	11141-16-5	11 U	11	37	20
10225	PCB-1242	53469-21-9	11 U	11	37	20
10225	PCB-1248	12672-29-6	7.1 U	7.1	37	20
10225	PCB-1254	11097-69-1	7.1 U	7.1	37	20
10225	PCB-1260	11096-82-5	7.1 U	7.1	37	20
10225	PCB-1262	37324-23-5	7.1 U	7.1	37	20
10225	PCB-1268	11100-14-4	7.1 U	7.1	37	20

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3910 SDG#: DE039-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,800	5.34	21.2		1
07914	Boron	7440-42-8	4.54 J	0.944	5.31		1
01650	Calcium	7440-70-2	3,690	6.50	21.2		1
01654	Iron	7439-89-6	19,400	5.00	21.2		1
01656	Lithium	7439-93-2	24.1	0.23	2.1		1
01657	Magnesium	7439-95-4	4,750	2.70	10.6		1
06958	Manganese	7439-96-5	293	0.0828	0.531		1
10145	Phosphorus	7723-14-0	390	0.594	10.6		1
01662	Potassium	7440-09-7	3,120	19.1	53.1		1
01667	Sodium	7440-23-5	79.9 J	39.6	106		1
07968	Strontium	7440-24-6	16.3	0.0658	0.531		1
06969	Tin	7440-31-5	2.34 J	1.06	10.6		1
06970	Titanium	7440-32-6	1,200	0.403	1.06		1
10146	Zirconium	7440-67-7	0.900 J	0.891	5.31		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.246	0.0637	0.212		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.23	0.0637	0.424		2
06126	Barium	7440-39-3	110	0.115	0.424		2
06127	Beryllium	7440-41-7	0.438	0.0170	0.106		2
06128	Cadmium	7440-43-9	0.358	0.0382	0.106		2
06131	Chromium	7440-47-3	22.4	0.127	0.424		2
06132	Cobalt	7440-48-4	8.04	0.0212	0.106		2
06133	Copper	7440-50-8	9.68	0.0700	0.424		2
06135	Lead	7439-92-1	10.5	0.0110	0.212		2
06138	Molybdenum	7439-98-7	0.611	0.0531	0.106		2
06139	Nickel	7440-02-0	12.6	0.106	0.424		2
06141	Selenium	7782-49-2	0.184 J	0.0424	0.424		2
06142	Silver	7440-22-4	0.0842 J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.377	0.0318	0.106		2
06148	Vanadium	7440-62-2	44.8	0.0233	0.106		2
06149	Zinc	7440-66-6	99.0	0.594	3.18		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0220 J	0.0029	0.102		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1	0.87	1.1		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.5		1
SW-846 7199							
			mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3910 SDG#: DE039-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	453	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.07	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	7.6	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 16:40	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 23:18	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 17:04	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 18:46	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 21:33	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 23:22	Lindsey K Lafferty	20
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3910 SDG#: DE039-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 12:42	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 17:40	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:42	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:42	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:18	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 02:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 18:48	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 15:42	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3910 SDG#: DE039-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3911 SDG#: DE039-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U 180	530		1
04688	Benzyl alcohol	100-51-6	180	U 180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180		1
04688	4-Chloroaniline	106-47-8	70	U 70	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530		1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	35	U 35	180		1
04688	4-Methylphenol	106-44-5	35	U 35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	35	U 35	180		1
04688	4-Nitroaniline	100-01-6	70	U 70	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	530		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3911 SDG#: DE039-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70	U 0.70	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.8		1
10138	Anthracene	120-12-7	0.35	U 0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.70	U 0.70	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.70	U 0.70	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.70	U 0.70	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.70	U 0.70	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U 0.70	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.3	U 6.3	19		1
10138	Di-n-butylphthalate	84-74-2	6.3	U 6.3	19		1
10138	Chrysene	218-01-9	0.35	U 0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U 0.70	1.8		1
10138	Diethylphthalate	84-66-2	6.3	U 6.3	19		1
10138	Dimethylphthalate	131-11-3	6.3	U 6.3	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	32	6.3	19		1
10138	Fluoranthene	206-44-0	0.70	U 0.70	1.8		1
10138	Fluorene	86-73-7	0.70	U 0.70	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U 0.70	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.70	U 0.70	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.70	U 0.70	1.8		1
10138	Naphthalene	91-20-3	0.70	U 0.70	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U 0.70	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.3	U 6.3	19		1
10138	Phenanthrene	85-01-8	0.70	U 0.70	1.8		1
10138	Pyrene	129-00-0	0.70	U 0.70	1.8		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Comparable data was not observed between the two extractions. The data reported here is from the initial extraction of the sample.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	3.8
10401	Dalapon	75-99-0	4.6	U 4.6	9.5
10401	2,4-DB	94-82-6	12	U 12	12
10401	Dicamba	1918-00-9	0.42	U 0.42	1.3
10401	Dinoseb	88-85-7	0.84	U 0.84	2.5
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U 0.84	1.8
10401	MCPA	94-74-6	80	U 80	260
10401	MCPP (Mecoprop)	93-65-2	79	U 79	260
10401	2,4,5-T	93-76-5	0.11	U 0.11	0.18
10401	2,4,5-TP	93-72-1	0.079	U 0.079	0.18

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3911 SDG#: DE039-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
statistical limits of 0-36%, the data is reported. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. Due to interfering peaks on the chromatogram, the values reported for 2,4-DB and 2,4,5-T represent the lowest reporting limits attainable.							
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18		1
01363	Beta BHC	319-85-7	0.12 U	0.12	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18		1
01363	Chlordane	57-74-9	0.84 U	0.84	3.6		1
01363	p,p-DDD	72-54-8	0.13 U	0.13	0.36		1
01363	p,p-DDE	72-55-9	30	1.4	7.2		20
01363	p,p-DDT	50-29-3	1.8 U	1.8	1.8		1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18		1
01363	Dieldrin	60-57-1	0.30 U	0.30	0.36		1
01363	Endosulfan I	959-98-8	0.064 U	0.064	0.18		1
01363	Endosulfan II	33213-65-9	0.30 U	0.30	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36		1
01363	Endrin	72-20-8	0.070 U	0.070	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.25 U	0.25	0.36		1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36		1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.18 U	0.18	0.18		1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8		1
01363	Mirex	2385-85-5	0.24 U	0.24	0.36		1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0		1

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not attained.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	22	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	21	0.35	1.8	1
10225	PCB-1260	11096-82-5	3.1	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3911 SDG#: DE039-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	21,000	5.21	20.7		1
07914	Boron	7440-42-8	2.74 J	0.921	5.18		1
01650	Calcium	7440-70-2	3,340	6.35	20.7		1
01654	Iron	7439-89-6	28,000	9.75	41.4		2
01656	Lithium	7439-93-2	27.9	0.23	2.1		1
01657	Magnesium	7439-95-4	5,570	2.63	10.4		1
06958	Manganese	7439-96-5	375	0.0808	0.518		1
10145	Phosphorus	7723-14-0	795	0.580	10.4		1
01662	Potassium	7440-09-7	5,670	18.6	51.8		1
01667	Sodium	7440-23-5	89.2 J	38.6	104		1
07968	Strontium	7440-24-6	24.6	0.0642	0.518		1
06969	Tin	7440-31-5	2.99 J	1.04	10.4		1
06970	Titanium	7440-32-6	1,510	0.393	1.04		1
10146	Zirconium	7440-67-7	1.36 J	0.870	5.18		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.392	0.0621	0.207		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.40	0.0621	0.414		2
06126	Barium	7440-39-3	120	0.112	0.414		2
06127	Beryllium	7440-41-7	0.893	0.0166	0.104		2
06128	Cadmium	7440-43-9	0.489	0.0373	0.104		2
06131	Chromium	7440-47-3	37.2	0.124	0.414		2
06132	Cobalt	7440-48-4	9.90	0.0207	0.104		2
06133	Copper	7440-50-8	21.3	0.0683	0.414		2
06135	Lead	7439-92-1	14.3	0.0108	0.207		2
06138	Molybdenum	7439-98-7	1.26	0.0518	0.104		2
06139	Nickel	7440-02-0	23.4	0.104	0.414		2
06141	Selenium	7782-49-2	0.210 J	0.0414	0.414		2
06142	Silver	7440-22-4	0.414	0.0124	0.104		2
06145	Thallium	7440-28-0	0.522	0.0311	0.104		2
06148	Vanadium	7440-62-2	63.6	0.0228	0.104		2
06149	Zinc	7440-66-6	146	0.580	3.11		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0113 J	0.0029	0.103		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.84 U	0.84	1.1		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.7		1
SW-846 7199							
			mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3911 SDG#: DE039-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05892	3a Cr VI by EPA 7199	18540-29-9	mg/kg U	mg/kg	mg/kg	mg/kg	1
			0.21	0.21	1.1		
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	mV	mV	mV	mV	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
			496	10.0	10.0		
SW-846 9045C modified							
			Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.					1
			6.77	0.0100	0.0100		
Wet Chemistry							
EPA 160.3 modified							
			%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	%	%	%	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						
			5.3	0.50	0.50		

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 17:15	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 23:53	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 17:32	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 19:14	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 21:46	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	01/13/2011 00:27	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 23:41	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3911 SDG#: DE039-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 20:54	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/28/2010 17:49	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 17:49	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:45	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:45	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:22	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 02:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 19:12	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 15:58	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3911 SDG#: DE039-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3912 SDG#: DE039-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	170	U 170	520		1
04688	Benzyl alcohol	100-51-6	170	U 170	520		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170		1
04688	Carbazole	86-74-8	17	U 17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170		1
04688	4-Chloroaniline	106-47-8	70	U 70	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170		1
04688	2-Chlorophenol	95-57-8	17	U 17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170		1
04688	Dibenzofuran	132-64-9	17	U 17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350		1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520		1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170		1
04688	Hexachlorobenzene	118-74-1	17	U 17	170		1
04688	Hexachlorobutadiene	87-68-3	70	U 70	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520		1
04688	Hexachloroethane	67-72-1	17	U 17	170		1
04688	Isophorone	78-59-1	17	U 17	170		1
04688	2-Methylphenol	95-48-7	35	U 35	170		1
04688	4-Methylphenol	106-44-5	35	U 35	170		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U 17	170		1
04688	3-Nitroaniline	99-09-2	35	U 35	170		1
04688	4-Nitroaniline	100-01-6	70	U 70	170		1
04688	Nitrobenzene	98-95-3	17	U 17	170		1
04688	2-Nitrophenol	88-75-5	17	U 17	170		1
04688	4-Nitrophenol	100-02-7	170	U 170	520		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U 170	520		1
04688	Phenol	108-95-2	17	U 17	170		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3912 SDG#: DE039-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	170		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	170		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70	U 0.70	1.7		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.7		1
10138	Anthracene	120-12-7	0.35	U 0.35	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.82	J 0.70	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.73	J 0.70	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	1.7	J 0.70	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	0.70	U 0.70	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U 0.70	1.7		1
10138	Butylbenzylphthalate	85-68-7	6.3	U 6.3	19		1
10138	Di-n-butylphthalate	84-74-2	6.3	U 6.3	19		1
10138	Chrysene	218-01-9	1.5	J 0.35	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U 0.70	1.7		1
10138	Diethylphthalate	84-66-2	6.3	U 6.3	19		1
10138	Dimethylphthalate	131-11-3	6.3	U 6.3	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.6	J 6.3	19		1
10138	Fluoranthene	206-44-0	1.7	J 0.70	1.7		1
10138	Fluorene	86-73-7	0.70	U 0.70	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U 0.70	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.70	U 0.70	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.70	U 0.70	1.7		1
10138	Naphthalene	91-20-3	0.70	U 0.70	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U 0.70	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.3	U 6.3	19		1
10138	Phenanthrene	85-01-8	0.75	J 0.70	1.7		1
10138	Pyrene	129-00-0	1.5	J 0.70	1.7		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Comparable data was not observed between the two extractions. The data reported here is from the initial extraction of the sample.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	3.8
10401	Dalapon	75-99-0	4.6	U 4.6	9.4
10401	2,4-DB	94-82-6	12	U 12	12
10401	Dicamba	1918-00-9	0.48	U 0.48	1.3
10401	Dinoseb	88-85-7	0.84	U 0.84	2.5
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U 0.84	1.8
10401	MCPA	94-74-6	80	U 80	260
10401	MCPP (Mecoprop)	93-65-2	79	U 79	260
10401	2,4,5-T	93-76-5	0.086	U 0.086	0.18
10401	2,4,5-TP	93-72-1	0.079	U 0.079	0.18

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3912 SDG#: DE039-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
statistical limits of 0-36%, the data is reported. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. Due to interfering peaks on the chromatogram, the values reported for 2,4-DB and dicamba represent the lowest reporting limits attainable.							
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17		1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.17		1
01363	Beta BHC	319-85-7	0.12 J	0.063	0.17		1
01363	Gamma BHC - Lindane	58-89-9	0.065 J	0.036	0.17		1
01363	Chlordane	57-74-9	0.84 U	0.84	3.6		1
01363	p,p-DDD	72-54-8	0.095 U	0.095	0.36		1
01363	p,p-DDE	72-55-9	1.8 U	1.8	1.8		1
01363	p,p-DDT	50-29-3	0.73 U	0.73	0.73		1
01363	Delta BHC	319-86-8	0.042 J	0.038	0.17		1
01363	Dieldrin	60-57-1	0.16 U	0.16	0.36		1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17		1
01363	Endosulfan II	33213-65-9	0.069 U	0.069	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.13 U	0.13	0.36		1
01363	Endrin	72-20-8	0.069 U	0.069	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.30 U	0.30	0.36		1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.36		1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17		1
01363	Heptachlor Epoxide	1024-57-3	0.11 U	0.11	0.17		1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.7		1
01363	Mirex	2385-85-5	0.19 U	0.19	0.36		1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9		1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.5	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.5	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.52 U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.52 U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.50 J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3912 SDG#: DE039-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,800	5.23	20.8		1
07914	Boron	7440-42-8	2.45 J	0.925	5.19		1
01650	Calcium	7440-70-2	3,410	6.37	20.8		1
01654	Iron	7439-89-6	28,000	4.89	20.8		1
01656	Lithium	7439-93-2	27.4	0.23	2.1		1
01657	Magnesium	7439-95-4	5,250	2.64	10.4		1
06958	Manganese	7439-96-5	364	0.0810	0.519		1
10145	Phosphorus	7723-14-0	736	0.582	10.4		1
01662	Potassium	7440-09-7	4,480	18.7	51.9		1
01667	Sodium	7440-23-5	100 J	38.8	104		1
07968	Strontium	7440-24-6	23.9	0.0644	0.519		1
06969	Tin	7440-31-5	2.93 J	1.04	10.4		1
06970	Titanium	7440-32-6	1,490	0.395	1.04		1
10146	Zirconium	7440-67-7	4.40 J	0.873	5.19		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.292	0.0623	0.208		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.68	0.0623	0.416		2
06126	Barium	7440-39-3	115	0.112	0.416		2
06127	Beryllium	7440-41-7	0.852	0.0166	0.104		2
06128	Cadmium	7440-43-9	0.387	0.0374	0.104		2
06131	Chromium	7440-47-3	34.5	0.125	0.416		2
06132	Cobalt	7440-48-4	9.55	0.0208	0.104		2
06133	Copper	7440-50-8	19.2	0.0686	0.416		2
06135	Lead	7439-92-1	16.5	0.0108	0.208		2
06138	Molybdenum	7439-98-7	1.11	0.0519	0.104		2
06139	Nickel	7440-02-0	20.6	0.104	0.416		2
06141	Selenium	7782-49-2	0.169 J	0.0416	0.416		2
06142	Silver	7440-22-4	0.342	0.0125	0.104		2
06145	Thallium	7440-28-0	0.435	0.0312	0.104		2
06148	Vanadium	7440-62-2	60.5	0.0229	0.104		2
06149	Zinc	7440-66-6	140	0.582	3.12		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0113 J	0.0030	0.104		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.84 U	0.84	1.0		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.5		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.42 J	0.21	1.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3912 SDG#: DE039-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	506	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.82	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	4.7	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 17:50	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011 00:27	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 17:59	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 19:42	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 22:01	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 23:59	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3912 SDG#: DE039-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/28/2010 17:52	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 17:52	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:48	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:48	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:23	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 03:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 19:36	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11001243201A	01/04/2011 16:22	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3913 SDG#: DE039-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U 180	530		1
04688	Benzyl alcohol	100-51-6	180	U 180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180		1
04688	4-Chloroaniline	106-47-8	70	U 70	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530		1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	35	U 35	180		1
04688	4-Methylphenol	106-44-5	35	U 35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	35	U 35	180		1
04688	4-Nitroaniline	100-01-6	70	U 70	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	530		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3913 SDG#: DE039-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70	U 0.70	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.8		1
10138	Anthracene	120-12-7	0.35	U 0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.70	U 0.70	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.70	U 0.70	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.70	U 0.70	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.70	U 0.70	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U 0.70	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.3	U 6.3	19		1
10138	Di-n-butylphthalate	84-74-2	6.3	U 6.3	19		1
10138	Chrysene	218-01-9	0.35	U 0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U 0.70	1.8		1
10138	Diethylphthalate	84-66-2	6.3	U 6.3	19		1
10138	Dimethylphthalate	131-11-3	6.3	U 6.3	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.3	U 6.3	19		1
10138	Fluoranthene	206-44-0	0.70	U 0.70	1.8		1
10138	Fluorene	86-73-7	0.70	U 0.70	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U 0.70	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.70	U 0.70	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.70	U 0.70	1.8		1
10138	Naphthalene	91-20-3	0.70	U 0.70	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U 0.70	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.3	U 6.3	19		1
10138	Phenanthrene	85-01-8	0.70	U 0.70	1.8		1
10138	Pyrene	129-00-0	0.70	U 0.70	1.8		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Comparable data was not observed between the two extractions. The data reported here is from the initial extraction of the sample.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	3.8
10401	Dalapon	75-99-0	4.6	U 4.6	9.5
10401	2,4-DB	94-82-6	17	U 17	17
10401	Dicamba	1918-00-9	0.42	U 0.42	1.3
10401	Dinoseb	88-85-7	0.84	U 0.84	2.5
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U 0.84	1.8
10401	MCPA	94-74-6	590	80	260
10401	MCPP (Mecoprop)	93-65-2	79	U 79	260
10401	2,4,5-T	93-76-5	0.14	U 0.14	0.18
10401	2,4,5-TP	93-72-1	0.079	U 0.079	0.18

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3913 SDG#: DE039-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
statistical limits of 0-36%, the data is reported. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. Due to interfering peaks on the chromatogram, the values reported for 2,4-DB and 2,4,5-T represent the lowest reporting limits attainable.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18		1
01363	Beta BHC	319-85-7	0.065 J	0.063	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.058 J	0.036	0.18		1
01363	Chlordane	57-74-9	8.4 U	8.4	36		10
01363	p,p-DDD	72-54-8	0.99 J	0.70	3.6		10
01363	p,p-DDE	72-55-9	210	7.0	36		100
01363	p,p-DDT	50-29-3	7.9	0.70	3.6		10
01363	Delta BHC	319-86-8	0.093 J	0.038	0.18		1
01363	Dieldrin	60-57-1	1.0 J	0.70	3.6		10
01363	Endosulfan I	959-98-8	0.46 U	0.46	1.8		10
01363	Endosulfan II	33213-65-9	0.70 U	0.70	3.6		10
01363	Endosulfan Sulfate	1031-07-8	1.8 J	0.70	3.6		10
01363	Endrin	72-20-8	0.70 U	0.70	3.6		10
01363	Endrin Aldehyde	7421-93-4	0.86 J	0.70	3.6		10
01363	Endrin Ketone	53494-70-5	0.70 U	0.70	3.6		10
01363	Heptachlor	76-44-8	0.063 U	0.063	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.36 U	0.36	1.8		10
01363	Methoxychlor	72-43-5	3.6 U	3.6	18		10
01363	Mirex	2385-85-5	0.70 U	0.70	3.6		10
01363	Toxaphene	8001-35-2	23 U	23	70		10
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	11 U	11	35		10
10225	Aroclor 5442	12642-23-8	11 U	11	35		10
10225	Aroclor 5460	11126-42-4	18 J	11	35		10
10225	PCB-1016	12674-11-2	3.5 U	3.5	18		10
10225	PCB-1221	11104-28-2	5.3 U	5.3	18		10
10225	PCB-1232	11141-16-5	5.5 U	5.5	18		10
10225	PCB-1242	53469-21-9	5.3 U	5.3	18		10
10225	PCB-1248	12672-29-6	3.5 U	3.5	18		10
10225	PCB-1254	11097-69-1	3.5 U	3.5	18		10
10225	PCB-1260	11096-82-5	7.6 U	7.6	18		10
10225	PCB-1262	37324-23-5	3.5 U	3.5	18		10
10225	PCB-1268	11100-14-4	3.5 U	3.5	18		10
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable. The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,800	5.11	20.3		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3913 SDG#: DE039-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
07914	Boron	7440-42-8	2.49 J	0.904	5.08		1
01650	Calcium	7440-70-2	3,200	6.22	20.3		1
01654	Iron	7439-89-6	25,100	9.56	40.6		2
01656	Lithium	7439-93-2	27.3	0.22	2.0		1
01657	Magnesium	7439-95-4	5,120	2.58	10.2		1
06958	Manganese	7439-96-5	377	0.0792	0.508		1
10145	Phosphorus	7723-14-0	740	0.569	10.2		1
01662	Potassium	7440-09-7	4,580	18.3	50.8		1
01667	Sodium	7440-23-5	84.5 J	37.9	102		1
07968	Strontium	7440-24-6	24.1	0.0630	0.508		1
06969	Tin	7440-31-5	2.55 J	1.02	10.2		1
06970	Titanium	7440-32-6	1,450	0.386	1.02		1
10146	Zirconium	7440-67-7	1.62 J	0.853	5.08		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.403	0.0627	0.209		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.9	0.0627	0.418		2
06126	Barium	7440-39-3	120	0.113	0.418		2
06127	Beryllium	7440-41-7	1.03	0.0167	0.105		2
06128	Cadmium	7440-43-9	0.468	0.0376	0.105		2
06131	Chromium	7440-47-3	38.0	0.125	0.418		2
06132	Cobalt	7440-48-4	10.4	0.0209	0.105		2
06133	Copper	7440-50-8	21.9	0.0690	0.418		2
06135	Lead	7439-92-1	16.0	0.0109	0.209		2
06138	Molybdenum	7439-98-7	1.23	0.0523	0.105		2
06139	Nickel	7440-02-0	22.6	0.105	0.418		2
06141	Selenium	7782-49-2	0.242 J	0.0418	0.418		2
06142	Silver	7440-22-4	0.133	0.0125	0.105		2
06145	Thallium	7440-28-0	0.491	0.0314	0.105		2
06148	Vanadium	7440-62-2	64.6	0.0230	0.105		2
06149	Zinc	7440-66-6	157	0.585	3.14		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0101 J	0.0029	0.103		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2	0.84	1.1		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.7		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.47 J	0.21	1.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3913 SDG#: DE039-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	509	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.56	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.3	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 22:13	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011 01:02	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 18:27	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 20:09	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 23:41	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 23:55	Jamie L Brillhart	10
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	01/07/2011 20:16	Jamie L Brillhart	100
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/29/2010 00:18	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3913 SDG#: DE039-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 20:58	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/28/2010 17:57	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 17:57	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:51	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:51	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:24	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201B	01/08/2011 03:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201B	01/06/2011 20:00	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 16:30	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	110070072301B	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201B	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3913 SDG#: DE039-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3914 SDG#: DE039-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U 180	530		1
04688	Benzyl alcohol	100-51-6	180	U 180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180		1
04688	4-Chloroaniline	106-47-8	71	U 71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530		1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	35	U 35	180		1
04688	4-Methylphenol	106-44-5	35	U 35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	35	U 35	180		1
04688	4-Nitroaniline	100-01-6	71	U 71	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	530		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3914 SDG#: DE039-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.8		1
10138	Anthracene	120-12-7	0.41	J 0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.8	U 0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.5	J 0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	4.5	U 0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.4	J 0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.4	J 0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	10	J 6.4	19		1
10138	Di-n-butylphthalate	84-74-2	7.0	J 6.4	19		1
10138	Chrysene	218-01-9	4.9	U 0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U 0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	110	6.4	19		1
10138	Fluoranthene	206-44-0	7.8	U 0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U 0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J 0.71	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.71	U 0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.86	J 0.71	1.8		1
10138	Naphthalene	91-20-3	0.98	J 0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U 0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U 6.4	19		1
10138	Phenanthrene	85-01-8	3.4	U 0.71	1.8		1
10138	Pyrene	129-00-0	5.8	U 0.71	1.8		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	3.8
10401	Dalapon	75-99-0	4.7	U 4.7	9.5
10401	2,4-DB	94-82-6	39	U 39	39
10401	Dicamba	1918-00-9	0.42	J 0.42	1.3
10401	Dinoseb	88-85-7	0.85	U 0.85	2.5
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U 0.85	1.8
10401	MCPA	94-74-6	3,200	81	270
10401	MCPP (Mecoprop)	93-65-2	80	U 80	270
10401	2,4,5-T	93-76-5	0.30	U 0.30	0.30
10401	2,4,5-TP	93-72-1	0.080	U 0.080	0.18

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3914 SDG#: DE039-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: Dicamba and 2,4,5-T							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.18 U	0.18	0.18		1
01363	Beta BHC	319-85-7	0.22 U	0.064	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18		1
01363	Chlordane	57-74-9	3.8 U	3.8	3.8		1
01363	p,p-DDD	72-54-8	0.097 U	0.097	0.36		1
01363	p,p-DDE	72-55-9	2.4 U	2.4	2.4		1
01363	p,p-DDT	50-29-3	0.90 U	0.90	0.90		1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18		1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36		1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36		1
01363	Endrin	72-20-8	0.070 U	0.070	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.31 U	0.31	0.36		1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36		1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.12 U	0.12	0.18		1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8		1
01363	Mirex	2385-85-5	0.26 U	0.26	0.36		1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0		1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	9.8	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8		1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8		1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8		1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8		1
10225	PCB-1254	11097-69-1	5.4	0.35	1.8		1
10225	PCB-1260	11096-82-5	2.7	0.35	1.8		1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3914 SDG#: DE039-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,700	5.13	20.4		1
07914	Boron	7440-42-8	2.87 J	0.907	5.10		1
01650	Calcium	7440-70-2	3,290	6.25	20.4		1
01654	Iron	7439-89-6	26,100	9.61	40.8		2
01656	Lithium	7439-93-2	25.0	0.22	2.0		1
01657	Magnesium	7439-95-4	5,090	2.59	10.2		1
06958	Manganese	7439-96-5	394	0.0795	0.510		1
10145	Phosphorus	7723-14-0	587	0.571	10.2		1
01662	Potassium	7440-09-7	5,080	18.4	51.0		1
01667	Sodium	7440-23-5	78.0 J	38.0	102		1
07968	Strontium	7440-24-6	25.6	0.0632	0.510		1
06969	Tin	7440-31-5	3.05 J	1.02	10.2		1
06970	Titanium	7440-32-6	1,480	0.387	1.02		1
10146	Zirconium	7440-67-7	1.38 J	0.857	5.10		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.233	0.0630	0.210		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.40	0.0630	0.420		2
06126	Barium	7440-39-3	128	0.113	0.420		2
06127	Beryllium	7440-41-7	0.838	0.0168	0.105		2
06128	Cadmium	7440-43-9	0.307	0.0378	0.105		2
06131	Chromium	7440-47-3	46.1	0.126	0.420		2
06132	Cobalt	7440-48-4	10.3	0.0210	0.105		2
06133	Copper	7440-50-8	19.9	0.0693	0.420		2
06135	Lead	7439-92-1	16.6	0.0109	0.210		2
06138	Molybdenum	7439-98-7	1.16	0.0525	0.105		2
06139	Nickel	7440-02-0	27.5	0.105	0.420		2
06141	Selenium	7782-49-2	0.225 J	0.0420	0.420		2
06142	Silver	7440-22-4	0.0991 J	0.0126	0.105		2
06145	Thallium	7440-28-0	0.479	0.0315	0.105		2
06148	Vanadium	7440-62-2	59.1	0.0231	0.105		2
06149	Zinc	7440-66-6	118	0.588	3.15		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0117 J	0.0030	0.105		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.85 U	0.85	1.1		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.8		1
SW-846 7199							
			mg/kg	mg/kg	mg/kg	mg/kg	

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Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3914 SDG#: DE039-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05892	3a Cr VI by EPA 7199	18540-29-9	mg/kg U	mg/kg	mg/kg	mg/kg	1
			0.21	0.21	1.1		
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	mV	mV	mV	mV	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
			502	10.0	10.0		
SW-846 9045C modified							
			Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.					1
			6.65	0.0100	0.0100		
Wet Chemistry							
EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	%	%	%	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						
			5.7	0.50	0.50		

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 22:48	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011 01:36	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 18:54	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 20:37	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/30/2010 00:09	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/29/2010 00:36	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1

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Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
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Submitted: 12/15/2010 09:40

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E3914 SDG#: DE039-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 21:01	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/28/2010 18:01	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/28/2010 18:01	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 18:01	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:54	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:54	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:25	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201B	01/08/2011 04:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201B	01/06/2011 21:36	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 16:46	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	110070072301B	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201B	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3914 SDG#: DE039-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3915 SDG#: DE039-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	770	U 770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	39	U 39	190		1
04688	4-Methylphenol	106-44-5	39	U 39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	39	U 39	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	580		1
04688	Phenol	108-95-2	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3915 SDG#: DE039-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77	U 0.77	1.9		1
10138	Acenaphthylene	208-96-8	0.39	U 0.39	1.9		1
10138	Anthracene	120-12-7	0.39	U 0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.77	U 0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.77	U 0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.94	J 0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	U 0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.77	U 0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21		1
10138	Chrysene	218-01-9	0.85	J 0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U 0.77	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U 6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U 6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J 6.9	21		1
10138	Fluoranthene	206-44-0	0.94	J 0.77	1.9		1
10138	Fluorene	86-73-7	0.77	U 0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	U 0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.77	U 0.77	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.77	U 0.77	1.9		1
10138	Naphthalene	91-20-3	0.77	U 0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U 0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U 6.9	21		1
10138	Phenanthrene	85-01-8	1.0	J 0.77	1.9		1
10138	Pyrene	129-00-0	0.77	U 0.77	1.9		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Comparable data was not observed between the two extractions. The data reported here is from the initial extraction of the sample.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401 2,4-D	94-75-7	1.4	U 1.4	4.2	1
10401 Dalapon	75-99-0	5.1	U 5.1	10	1
10401 2,4-DB	94-82-6	8.9	U 8.9	8.9	1
10401 Dicamba	1918-00-9	1.3	J 0.46	1.4	1
10401 Dinoseb	88-85-7	0.93	U 0.93	2.8	1
10401 2,4-DP (Dichlorprop)	120-36-5	0.93	U 0.93	2.0	1
10401 MCPA	94-74-6	240	U 240	290	1
10401 MCPP (Mecoprop)	93-65-2	140	U 140	290	1
10401 2,4,5-T	93-76-5	0.095	U 0.095	0.20	1
10401 2,4,5-TP	93-72-1	0.23	0.087	0.20	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3915 SDG#: DE039-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and MCPA.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.045 U	0.045	0.19		1
01363	Chlordane	57-74-9	4.2 U	4.2	4.2		1
01363	p,p-DDD	72-54-8	0.20 U	0.20	0.39		1
01363	p,p-DDE	72-55-9	0.69 U	0.69	0.69		1
01363	p,p-DDT	50-29-3	2.2 U	2.2	2.2		1
01363	Delta BHC	319-86-8	0.24	0.042	0.19		1
01363	Dieldrin	60-57-1	0.22 U	0.22	0.39		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.13 U	0.13	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.49	0.076	0.39		1
01363	Endrin	72-20-8	0.076 U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.61 U	0.61	0.61		1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.093 U	0.093	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.39 U	0.39	0.39		1
01363	Methoxychlor	72-43-5	1.3 U	1.3	1.9		1
01363	Mirex	2385-85-5	0.61 U	0.61	0.61		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	2.3 U	2.3	7.6	2
10225	Aroclor 5442	12642-23-8	2.3 U	2.3	7.6	2
10225	Aroclor 5460	11126-42-4	3.6 J	2.3	7.6	2
10225	PCB-1016	12674-11-2	0.76 U	0.76	3.9	2
10225	PCB-1221	11104-28-2	1.2 U	1.2	3.9	2
10225	PCB-1232	11141-16-5	1.2 U	1.2	3.9	2
10225	PCB-1242	53469-21-9	1.2 U	1.2	3.9	2
10225	PCB-1248	12672-29-6	6.0 U	6.0	6.0	2
10225	PCB-1254	11097-69-1	11	0.76	3.9	2
10225	PCB-1260	11096-82-5	3.1 U	3.1	3.1	2
10225	PCB-1262	37324-23-5	0.76 U	0.76	3.9	2
10225	PCB-1268	11100-14-4	0.76 U	0.76	3.9	2

When the concentration detected on the primary and confirmation

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3915 SDG#: DE039-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: PCB-1248 and PCB-1260. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,500	5.82	23.1		1
07914	Boron	7440-42-8	4.15 J	1.03	5.79		1
01650	Calcium	7440-70-2	3,280	7.09	23.1		1
01654	Iron	7439-89-6	21,200	5.45	23.1		1
01656	Lithium	7439-93-2	24.6	0.25	2.3		1
01657	Magnesium	7439-95-4	5,510	2.94	11.6		1
06958	Manganese	7439-96-5	308	0.0903	0.579		1
10145	Phosphorus	7723-14-0	446	0.648	11.6		1
01662	Potassium	7440-09-7	3,150	20.8	57.9		1
01667	Sodium	7440-23-5	86.1 J	43.2	116		1
07968	Strontium	7440-24-6	18.0	0.0718	0.579		1
06969	Tin	7440-31-5	2.57 J	1.16	11.6		1
06970	Titanium	7440-32-6	1,250	0.440	1.16		1
10146	Zirconium	7440-67-7	1.31 J	0.972	5.79		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.164 J	0.0681	0.227		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.17	0.0681	0.454		2
06126	Barium	7440-39-3	126	0.123	0.454		2
06127	Beryllium	7440-41-7	0.500	0.0182	0.113		2
06128	Cadmium	7440-43-9	0.259	0.0408	0.113		2
06131	Chromium	7440-47-3	26.8	0.136	0.454		2
06132	Cobalt	7440-48-4	7.14	0.0227	0.113		2
06133	Copper	7440-50-8	10.6	0.0749	0.454		2
06135	Lead	7439-92-1	16.2	0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.731	0.0567	0.113		2
06139	Nickel	7440-02-0	15.8	0.113	0.454		2
06141	Selenium	7782-49-2	0.225 J	0.0454	0.454		2
06142	Silver	7440-22-4	0.146	0.0136	0.113		2
06145	Thallium	7440-28-0	0.347	0.0340	0.113		2
06148	Vanadium	7440-62-2	54.9	0.0250	0.113		2
06149	Zinc	7440-66-6	88.1	0.635	3.40		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0513 J	0.0032	0.111		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1 J	0.93	1.2		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3915 SDG#: DE039-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.7		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.2		1
ASTM D1498			mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	501	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.96	0.0100	0.0100		1
Wet Chemistry EPA 160.3 modified			%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	13.6	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 23:23	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011 02:11	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 19:22	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 21:05	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/30/2010 00:22	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/29/2010 00:55	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3915 SDG#: DE039-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 12:58	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:58	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:58	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:26	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201B	01/08/2011 04:43	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201B	01/06/2011 22:00	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 17:18	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	110070072301B	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201B	01/05/2011 13:20	Nancy J Shoop	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3915 SDG#: DE039-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3916 SDG#: DE039-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	770	U 770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	47	J 19	390		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	39	U 39	190		1
04688	4-Methylphenol	106-44-5	39	U 39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	39	U 39	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	580		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3916 SDG#: DE039-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77	U 0.77	1.9		1
10138	Acenaphthylene	208-96-8	0.39	U 0.39	1.9		1
10138	Anthracene	120-12-7	1.0	J 0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	3.1	0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	2.3	0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	5.6	0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.6	J 0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	1.8	J 0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	9.1	J 7.0	21		1
10138	Di-n-butylphthalate	84-74-2	7.0	U 7.0	21		1
10138	Chrysene	218-01-9	5.1	0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U 0.77	1.9		1
10138	Diethylphthalate	84-66-2	7.0	U 7.0	21		1
10138	Dimethylphthalate	131-11-3	7.0	U 7.0	21		1
10138	Fluoranthene	206-44-0	8.6	0.77	1.9		1
10138	Fluorene	86-73-7	0.77	U 0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.3	J 0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.77	U 0.77	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.77	U 0.77	1.9		1
10138	Naphthalene	91-20-3	0.77	U 0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U 0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	7.0	U 7.0	21		1
10138	Phenanthrene	85-01-8	3.9	0.77	1.9		1
10138	Pyrene	129-00-0	6.1	0.77	1.9		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.4	U 1.4	4.2
10401	Dalapon	75-99-0	5.1	U 5.1	10
10401	2,4-DB	94-82-6	1.3	U 1.3	2.0
10401	Dicamba	1918-00-9	0.57	J 0.46	1.4
10401	Dinoseb	88-85-7	0.93	U 0.93	2.8
10401	2,4-DP (Dichlorprop)	120-36-5	0.93	U 0.93	2.0
10401	MCPA	94-74-6	1,200	88	290
10401	MCPP (Mecoprop)	93-65-2	87	U 87	290
10401	2,4,5-T	93-76-5	0.20	U 0.20	0.20
10401	2,4,5-TP	93-72-1	0.087	U 0.087	0.20

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3916 SDG#: DE039-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: dicamba, 2,4,5-T and 2,4-DB.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.077 U	0.077	0.19		1
01363	Alpha BHC	319-84-6	0.066 J	0.039	0.19		1
01363	Beta BHC	319-85-7	0.070 U	0.070	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	0.93 U	0.93	3.9		1
01363	p,p-DDD	72-54-8	0.21 U	0.21	0.39		1
01363	p,p-DDE	72-55-9	1.9 U	1.9	1.9		1
01363	p,p-DDT	50-29-3	4.4 U	0.38	2.0		5
01363	Delta BHC	319-86-8	0.17 U	0.17	0.19		1
01363	Dieldrin	60-57-1	0.87 U	0.87	0.87		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.092 U	0.092	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.44 U	0.44	0.44		1
01363	Endrin	72-20-8	0.077 U	0.077	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.64 U	0.64	0.64		1
01363	Endrin Ketone	53494-70-5	0.077 U	0.077	0.39		1
01363	Heptachlor	76-44-8	0.070 U	0.070	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.16 U	0.16	0.19		1
01363	Methoxychlor	72-43-5	0.49 U	0.49	1.9		1
01363	Mirex	2385-85-5	0.42 U	0.42	0.42		1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.7		1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	2.3 U	2.3	7.7	2
10225	Aroclor 5442	12642-23-8	2.3 U	2.3	7.7	2
10225	Aroclor 5460	11126-42-4	22	2.3	7.7	2
10225	PCB-1016	12674-11-2	0.77 U	0.77	3.9	2
10225	PCB-1221	11104-28-2	1.2 U	1.2	3.9	2
10225	PCB-1232	11141-16-5	1.2 U	1.2	3.9	2
10225	PCB-1242	53469-21-9	1.2 U	1.2	3.9	2
10225	PCB-1248	12672-29-6	17	0.77	3.9	2
10225	PCB-1254	11097-69-1	18	0.77	3.9	2
10225	PCB-1260	11096-82-5	12	0.77	3.9	2
10225	PCB-1262	37324-23-5	0.77 U	0.77	3.9	2
10225	PCB-1268	11100-14-4	0.77 U	0.77	3.9	2

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3916 SDG#: DE039-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,500	5.78	23.0		1
07914	Boron	7440-42-8	4.12 J	1.02	5.74		1
01650	Calcium	7440-70-2	3,130	7.04	23.0		1
01654	Iron	7439-89-6	22,200	5.41	23.0		1
01656	Lithium	7439-93-2	25.7	0.25	2.3		1
01657	Magnesium	7439-95-4	4,510	2.92	11.5		1
06958	Manganese	7439-96-5	340	0.0896	0.574		1
10145	Phosphorus	7723-14-0	437	0.643	11.5		1
01662	Potassium	7440-09-7	3,830	20.7	57.4		1
01667	Sodium	7440-23-5	112 J	42.8	115		1
07968	Strontium	7440-24-6	20.6	0.0712	0.574		1
06969	Tin	7440-31-5	2.97 J	1.15	11.5		1
06970	Titanium	7440-32-6	1,290	0.436	1.15		1
10146	Zirconium	7440-67-7	0.965 U	0.965	5.74		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.128 J	0.0689	0.230		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.61	0.0689	0.459		2
06126	Barium	7440-39-3	150	0.124	0.459		2
06127	Beryllium	7440-41-7	0.666	0.0184	0.115		2
06128	Cadmium	7440-43-9	0.260	0.0413	0.115		2
06131	Chromium	7440-47-3	24.3	0.138	0.459		2
06132	Cobalt	7440-48-4	7.27	0.0230	0.115		2
06133	Copper	7440-50-8	11.3	0.0758	0.459		2
06135	Lead	7439-92-1	19.5	0.0119	0.230		2
06138	Molybdenum	7439-98-7	0.940	0.0574	0.115		2
06139	Nickel	7440-02-0	15.0	0.115	0.459		2
06141	Selenium	7782-49-2	0.177 J	0.0459	0.459		2
06142	Silver	7440-22-4	0.575	0.0138	0.115		2
06145	Thallium	7440-28-0	0.465	0.0345	0.115		2
06148	Vanadium	7440-62-2	46.8	0.0253	0.115		2
06149	Zinc	7440-66-6	105	0.643	3.45		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.614	0.0033	0.114		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7	0.93	1.2		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.8		1
SW-846 7199							
			mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3916 SDG#: DE039-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05892	3a Cr VI by EPA 7199	18540-29-9	mg/kg U	mg/kg	mg/kg	mg/kg	1
			0.23	0.23	1.2		
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	mV	mV	mV	mV	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
			422	10.0	10.0		
SW-846 9045C modified							
			Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.					1
			7.28	0.0100	0.0100		
Wet Chemistry							
EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	%	%	%	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						
			13.8	0.50	0.50		

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 23:57	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011 02:45	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 19:50	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 21:33	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/30/2010 00:37	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	01/07/2011 20:31	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/29/2010 01:13	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3916 SDG#: DE039-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 13:07	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/28/2010 18:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 13:07	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 13:07	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:27	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201B	01/08/2011 04:57	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201B	01/06/2011 22:24	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 17:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	110070072301B	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201B	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103B	12/16/2010 14:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3916 SDG#: DE039-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403B	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.6 U	6.6	7.9		0.87
06192	Benzene	71-43-2	0.1 U	0.1	4.0		0.87
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.0		0.87
06192	Bromochloromethane	74-97-5	0.33 U	0.33	4.0		0.87
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.0		0.87
06192	Bromoform	75-25-2	0.40 U	0.40	4.0		0.87
06192	Bromomethane	74-83-9	0.25 U	0.25	4.0		0.87
06192	2-Butanone	78-93-3	1.2 U	1.2	7.9		0.87
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.0		0.87
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.0		0.87
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.0		0.87
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.0		0.87
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.0		0.87
06192	Chloroethane	75-00-3	0.13 U	0.13	4.0		0.87
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30 U	0.30	4.0		0.87
06192	Chloroform	67-66-3	0.12 U	0.12	4.0		0.87
06192	Chloromethane	74-87-3	0.33 U	0.33	4.0		0.87
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.0		0.87
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.0		0.87
06192	Chlorotrifluoroethene	79-38-9	0.50 U	0.50	5.0		0.87
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.70 U	0.70	4.0		0.87
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	4.0		0.87
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	4.0		0.87
06192	Dibromomethane	74-95-3	0.24 U	0.24	4.0		0.87
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.0		0.87
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.0		0.87
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.0		0.87
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.0		0.87
06192	1,1-Dichloroethane	75-34-3	0.1 U	0.1	4.0		0.87
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.0		0.87
06192	1,1-Dichloroethene	75-35-4	0.39 U	0.39	4.0		0.87
06192	cis-1,2-Dichloroethene	156-59-2	0.19 U	0.19	4.0		0.87
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.0		0.87
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	4.0		0.87
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.0		0.87
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	4.0		0.87
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.0		0.87
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.0		0.87
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	4.0		0.87
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.0		0.87
06192	Freon 113	76-13-1	0.11 U	0.11	4.0		0.87
06192	Freon 133a	75-88-7	0.50 U	0.50	5.0		0.87
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.0		0.87
06192	2-Hexanone	591-78-6	1.6 U	1.6	7.9		0.87
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.0		0.87
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.0		0.87
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	4.0		0.87
06192	4-Methyl-2-pentanone	108-10-1	0.39 U	0.39	7.9		0.87
06192	Methylene Chloride	75-09-2	3.3 J	0.24	4.0		0.87
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.0		0.87

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.1 U	0.1	4.0		0.87
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.0		0.87
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23 U	0.23	4.0		0.87
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	4.0		0.87
06192	Toluene	108-88-3	0.08 U	0.08	4.0		0.87
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.0		0.87
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	4.0		0.87
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	4.0		0.87
06192	1,1,2-Trichloroethane	79-00-5	0.27 U	0.27	4.0		0.87
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.0		0.87
06192	Trichlorofluoromethane	75-69-4	0.29 U	0.29	4.0		0.87
06192	1,2,3-Trichloropropane	96-18-4	0.33 U	0.33	4.0		0.87
06192	1,2,4-Trimethylbenzene	95-63-6	0.40 U	0.40	4.0		0.87
06192	1,3,5-Trimethylbenzene	108-67-8	0.1 U	0.1	4.0		0.87
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	4.0		0.87
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	4.0		0.87
06192	o-Xylene	95-47-6	0.17 U	0.17	4.0		0.87
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.7 U	4.7	14		20.39
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	74.9	19.1	38.3		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	770	U 770	2,300		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77	U 0.77	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.77	U 0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.77	U 0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.77	U 0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	U 0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.77	U 0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21		1
10138	Chrysene	218-01-9	0.38	U 0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U 0.77	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U 6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U 6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9	U 6.9	21		1
10138	Fluoranthene	206-44-0	0.77	U 0.77	1.9		1
10138	Fluorene	86-73-7	0.77	U 0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	U 0.77	1.9		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
			ug/kg	ug/kg	ug/kg	ug/kg	
10138	1-Methylnaphthalene	90-12-0	0.77 U	0.77	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.77 U	0.77	1.9		1
10138	Naphthalene	91-20-3	0.77 U	0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.77 U	0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21		1
10138	Phenanthrene	85-01-8	0.77 U	0.77	1.9		1
10138	Pyrene	129-00-0	0.77 U	0.77	1.9		1
The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
GC Volatiles TPH GRO SW-846 8015B mod							
			mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.1		23.81
Explosives SW-846 8330A							
			ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	86	U 86	170	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	57	U 57	170	1000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U 110	340	1000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U 110	340	1000000	1
10132	1,3-Dinitrobenzene	99-65-0	57	U 57	170	1000000	1
10132	2,4-Dinitrotoluene	121-14-2	57	U 57	170	1000000	1
10132	2,6-Dinitrotoluene	606-20-2	57	U 57	170	1000000	1
10132	HMX	2691-41-0	140	U 140	430	1000000	1
10132	Nitrobenzene	98-95-3	57	U 57	170	1000000	1
10132	Nitroglycerin	55-63-0	1,100	U 1,100	3,400	1000000	1
10132	2-Nitrotoluene	88-72-2	110	U 110	170	1000000	1
10132	3-Nitrotoluene	99-08-1	140	U 140	170	1000000	1
10132	4-Nitrotoluene	99-99-0	110	U 110	170	1000000	1
10132	PETN	78-11-5	1,100	U 1,100	3,400	1000000	1
10132	RDX	121-82-4	72	U 72	170	1000000	1
10132	Tetryl	479-45-8	88	U 88	170	1000000	1

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	57	U 57	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	57	U 57	170	10000000	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by 8315A	50-00-0	690	U 690	1,700		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U 1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U 1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U 1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U 0.38	2.0		1
10225	PCB-1221	11104-28-2	0.57	U 0.57	2.0		1
10225	PCB-1232	11141-16-5	0.60	U 0.60	2.0		1
10225	PCB-1242	53469-21-9	0.57	U 0.57	2.0		1
10225	PCB-1248	12672-29-6	0.38	U 0.38	2.0		1
10225	PCB-1254	11097-69-1	1.2	J 0.38	2.0		1
10225	PCB-1260	11096-82-5	0.38	U 0.38	2.0		1
10225	PCB-1262	37324-23-5	0.38	U 0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U 0.38	2.0		1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.46	U 0.46	1.4		1
10199	EFH (C15-C20)	n.a.	0.46	U 0.46	1.4		1
10199	EFH (C21-C30)	n.a.	3.6	0.46	1.4		1
10199	EFH (C30 - C40)	n.a.	8.9	0.46	1.4		1
10199	EFH (C8-C11)	n.a.	0.46	U 0.46	1.4		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110	U 110	570		1
10501	Isopropanol	67-63-0	110	U 110	570		1
10501	Methanol	67-56-1	160	J 110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7	U 5.7	14		1
08283	Ethylene glycol	107-21-1	5.7	U 5.7	14		1
08283	Propylene glycol	57-55-6	5.7	U 5.7	14		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	

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SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

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Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/15/2010 09:40

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E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls							
	SW-846 8015B		mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	2.6 U	2.6	6.0		1
10318	o-Terphenyl	84-15-1	2.6 U	2.6	6.0		1
10318	p-Terphenyl	92-94-4	2.6 U	2.6	6.0		1
Reporting limits were raised due to limited sample volume.							
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,400	5.55	22.1		1
07914	Boron	7440-42-8	0.988 J	0.983	5.52		1
01650	Calcium	7440-70-2	4,230	6.77	22.1		1
01654	Iron	7439-89-6	25,900	10.4	44.2		2
01656	Lithium	7439-93-2	31.9	0.24	2.2		1
01657	Magnesium	7439-95-4	6,480	2.80	11.0		1
06958	Manganese	7439-96-5	387	0.0861	0.552		1
10145	Phosphorus	7723-14-0	537	0.618	11.0		1
01662	Potassium	7440-09-7	3,500	19.9	55.2		1
01667	Sodium	7440-23-5	133	41.2	110		1
07968	Strontium	7440-24-6	22.3	0.0684	0.552		1
06969	Tin	7440-31-5	2.92 J	1.10	11.0		1
06970	Titanium	7440-32-6	1,610	0.420	1.10		1
10146	Zirconium	7440-67-7	0.927 U	0.927	5.52		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.391	0.0662	0.221		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	12.5	0.0662	0.442		2
06126	Barium	7440-39-3	183	0.119	0.442		2
06127	Beryllium	7440-41-7	0.913	0.0177	0.110		2
06128	Cadmium	7440-43-9	0.220	0.0397	0.110		2
06131	Chromium	7440-47-3	37.4	0.132	0.442		2
06132	Cobalt	7440-48-4	11.7	0.0221	0.110		2
06133	Copper	7440-50-8	19.2	0.0729	0.442		2
06135	Lead	7439-92-1	12.3	0.0115	0.221		2
06138	Molybdenum	7439-98-7	1.12	0.0552	0.110		2
06139	Nickel	7440-02-0	23.8	0.110	0.442		2
06141	Selenium	7782-49-2	0.268 J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0336 J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.657	0.0331	0.110		2
06148	Vanadium	7440-62-2	71.0	0.0243	0.110		2
06149	Zinc	7440-66-6	119	0.618	3.31		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.110		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.95 J	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.3 J	0.92	1.7		1

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SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

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Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.4	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.1	mg/kg	1
SW-846 9012B							
05895	21a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.55	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	423	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	7.41	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	12.9	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-060-SA5C-SB-10.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 21:39	Laura M Krieger	0.87
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 13:40	Jason M Long	20.39
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:46	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034923319	12/15/2010 22:43	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10361SLB026	01/05/2011 20:07	Timothy J Trees	1

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SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

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Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3917 SDG#: DE039-17*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/15/2011 00:32	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011 03:20	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10361SLB026	12/27/2010 08:15	Joseph S Feister	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34B	12/17/2010 16:02	Elizabeth J Marin	23.81
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:42	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 12:22	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 01:22	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/29/2010 01:32	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103570006A	12/27/2010 16:11	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/21/2010 00:48	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103510010A	12/21/2010 17:40	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550027A	12/24/2010 02:43	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	103570006A	12/23/2010 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550027A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103510010A	12/17/2010 12:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 21:05	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 01/19/2011 11:07

E3917 SDG#: DE039-17*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 13:10	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 13:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 13:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:29	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201B	01/08/2011 05:12	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11007007201B	01/08/2011 05:12	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201B	01/06/2011 22:48	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 17:50	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202B	12/27/2010 20:30	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	110070072301B	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201B	01/05/2011 13:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202B	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103B	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403B	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11005162401A	01/05/2011 18:13	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B103501AA Sample number(s): 6164941-6164942, 6164945-6164947, 6164957									
Acetone	6.7 U	6.7	8.0	ug/kg	189	181	32-209	5	30
Benzene	0.10 U	0.10	4.0	ug/kg	105	105	80-120	0	30
Bromobenzene	0.13 U	0.13	4.0	ug/kg	93	92	79-120	1	30
Bromochloromethane	0.33 U	0.33	4.0	ug/kg	101	101	79-124	0	30
Bromodichloromethane	0.08 U	0.08	4.0	ug/kg	98	97	78-120	0	30
Bromoform	0.40 U	0.40	4.0	ug/kg	95	94	70-120	1	30
Bromomethane	0.25 U	0.25	4.0	ug/kg	76	77	32-162	2	30
2-Butanone	1.2 U	1.2	8.0	ug/kg	144	139	46-153	3	30
n-Butylbenzene	0.12 U	0.12	4.0	ug/kg	100	99	72-120	1	30
sec-Butylbenzene	0.06 U	0.06	4.0	ug/kg	99	99	75-120	0	30
tert-Butylbenzene	0.16 U	0.16	4.0	ug/kg	94	95	75-120	1	30
Carbon Tetrachloride	0.14 U	0.14	4.0	ug/kg	103	102	69-122	1	30
Chlorobenzene	0.11 U	0.11	4.0	ug/kg	98	98	80-120	0	30
Chloroethane	0.13 U	0.13	4.0	ug/kg	80	82	37-154	2	30
2-Chloroethyl Vinyl Ether	0.30 U	0.30	4.0	ug/kg	106	103	43-146	3	30
Chloroform	0.37 J	0.12	4.0	ug/kg	104	103	80-120	0	30
Chloromethane	0.33 U	0.33	4.0	ug/kg	89	90	54-132	0	30
2-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	96	96	78-120	1	30
4-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	96	95	79-120	0	30
Chlorotrifluoroethene	0.50 U	0.50	5.0	ug/kg	84	85	22-131	2	30
1,2-Dibromo-3-chloropropane	0.70 U	0.70	4.0	ug/kg	97	94	58-120	4	30
Dibromochloromethane	0.20 U	0.20	4.0	ug/kg	97	95	77-120	2	30
1,2-Dibromoethane	0.17 U	0.17	4.0	ug/kg	99	97	80-120	2	30
Dibromomethane	0.24 U	0.24	4.0	ug/kg	102	100	80-120	2	30
1,2-Dichlorobenzene	0.09 U	0.09	4.0	ug/kg	95	95	79-120	0	30
1,3-Dichlorobenzene	0.12 U	0.12	4.0	ug/kg	93	93	78-120	0	30
1,4-Dichlorobenzene	0.16 U	0.16	4.0	ug/kg	95	93	79-120	1	30
Dichlorodifluoromethane	0.12 U	0.12	4.0	ug/kg	76	75	20-120	1	30
1,1-Dichloroethane	0.10 U	0.10	4.0	ug/kg	104	104	80-120	1	30
1,2-Dichloroethane	0.15 U	0.15	4.0	ug/kg	103	102	71-129	1	30
1,1-Dichloroethene	0.39 U	0.39	4.0	ug/kg	101	100	73-123	1	30
cis-1,2-Dichloroethene	0.19 U	0.19	4.0	ug/kg	103	102	80-120	2	30
trans-1,2-Dichloroethene	0.12 U	0.12	4.0	ug/kg	102	101	79-120	0	30
1,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	104	103	80-120	1	30
1,3-Dichloropropane	0.08 U	0.08	4.0	ug/kg	100	99	80-120	1	30
2,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	102	101	72-123	1	30
1,1-Dichloropropene	0.13 U	0.13	4.0	ug/kg	104	104	77-120	1	30
cis-1,3-Dichloropropene	0.16 U	0.16	4.0	ug/kg	94	96	80-120	2	30
trans-1,3-Dichloropropene	0.17 U	0.17	4.0	ug/kg	95	94	77-120	1	30
Ethylbenzene	0.06 U	0.06	4.0	ug/kg	100	100	80-120	0	30
Freon 113	0.11 U	0.11	4.0	ug/kg	101	100	61-126	1	30
Freon 133a	0.50 U	0.50	5.0	ug/kg	85	85	78-120	1	30
Hexachlorobutadiene	0.14 U	0.14	4.0	ug/kg	90	91	57-120	1	30
2-Hexanone	1.6 U	1.6	8.0	ug/kg	95	93	45-155	3	30
Isopropylbenzene	0.06 U	0.06	4.0	ug/kg	101	100	76-120	1	30
p-Isopropyltoluene	0.11 U	0.11	4.0	ug/kg	99	100	75-120	1	30

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21 U	0.21	4.0	ug/kg	101	100	74-121	1	30
4-Methyl-2-pentanone	0.39 U	0.39	8.0	ug/kg	84	82	61-134	3	30
Methylene Chloride	1.0 J	0.24	4.0	ug/kg	99	100	76-124	1	30
n-Propylbenzene	0.07 U	0.07	4.0	ug/kg	101	101	77-120	0	30
Styrene	0.10 U	0.10	4.0	ug/kg	97	97	76-120	0	30
1,1,1,2-Tetrachloroethane	0.11 U	0.11	4.0	ug/kg	98	97	80-120	1	30
1,1,2,2-Tetrachloroethane	0.23 U	0.23	4.0	ug/kg	97	95	71-123	2	30
Tetrachloroethene	0.20 U	0.20	4.0	ug/kg	100	98	77-120	2	30
Toluene	0.08 U	0.08	4.0	ug/kg	101	100	80-120	0	30
1,2,3-Trichlorobenzene	0.14 U	0.14	4.0	ug/kg	92	92	64-120	0	30
1,2,4-Trichlorobenzene	0.18 U	0.18	4.0	ug/kg	90	91	68-120	0	30
1,1,1-Trichloroethane	0.20 U	0.20	4.0	ug/kg	103	101	71-125	2	30
1,1,2-Trichloroethane	0.27 U	0.27	4.0	ug/kg	99	96	80-120	2	30
Trichloroethene	0.15 U	0.15	4.0	ug/kg	101	100	80-120	0	30
Trichlorofluoromethane	0.29 U	0.29	4.0	ug/kg	86	85	58-133	1	30
1,2,3-Trichloropropane	0.33 U	0.33	4.0	ug/kg	99	95	71-123	4	30
1,2,4-Trimethylbenzene	0.40 U	0.40	4.0	ug/kg	98	99	79-120	1	30
1,3,5-Trimethylbenzene	0.10 U	0.10	4.0	ug/kg	98	98	78-120	0	30
Vinyl Chloride	0.20 U	0.20	4.0	ug/kg	88	88	53-120	0	30
m+p-Xylene	0.17 U	0.17	4.0	ug/kg	101	100	80-120	1	30
o-Xylene	0.17 U	0.17	4.0	ug/kg	98	96	80-120	2	30
Batch number: E103502AA	Sample number(s): 6164943-6164944								
1,4-Dioxane	0.5 U	0.5	2.0	ug/l	98		60-132		
Batch number: E103511AA	Sample number(s): 6164941-6164942, 6164945-6164947, 6164957								
1,4-Dioxane	5.0 U	5.0	15	ug/kg	102	101	70-130	1	30
Batch number: Y103512AA	Sample number(s): 6164944								
Acetone	6 U	6.	20	ug/l	186	190	49-234	2	30
Benzene	0.5 U	0.5	5	ug/l	96	95	79-120	1	30
Bromobenzene	1 U	1.	5	ug/l	103	103	80-120	0	30
Bromochloromethane	1 U	1.	5	ug/l	94	92	80-120	2	30
Bromodichloromethane	1 U	1.	5	ug/l	91	91	80-120	0	30
Bromoform	1 U	1.	5	ug/l	93	92	61-120	2	30
Bromomethane	1 U	1.	5	ug/l	87	79	44-120	10	30
2-Butanone	3 U	3.	10	ug/l	125	130	66-151	4	30
n-Butylbenzene	1 U	1.	5	ug/l	100	100	74-120	1	30
sec-Butylbenzene	1 U	1.	5	ug/l	107	106	78-120	1	30
tert-Butylbenzene	1 U	1.	5	ug/l	97	97	80-120	0	30
Carbon Tetrachloride	1 U	1.	5	ug/l	99	96	75-123	3	30
Chlorobenzene	0.8 U	0.8	5	ug/l	94	95	80-120	0	30
Chloroethane	1 U	1.	5	ug/l	82	75	49-129	9	30
2-Chloroethyl Vinyl Ether	2 U	2.	10	ug/l	101	102	56-129	1	30
Chloroform	0.8 U	0.8	5	ug/l	98	96	77-122	2	30
Chloromethane	1 U	1.	5	ug/l	83	81	60-129	2	30
2-Chlorotoluene	1 U	1.	5	ug/l	104	103	80-120	1	30
4-Chlorotoluene	1 U	1.	5	ug/l	99	99	80-120	0	30
Chlorotrifluoroethene	2 U	2.	5	ug/l	73	76	38-136	4	30
1,2-Dibromo-3-chloropropane	2 U	2.	5	ug/l	105	108	66-120	3	30
Dibromochloromethane	1 U	1.	5	ug/l	94	94	80-120	1	30
1,2-Dibromoethane	1 U	1.	5	ug/l	97	99	80-120	2	30
Dibromomethane	1 U	1.	5	ug/l	94	93	80-120	1	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	96	95	80-120	1	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	102	100	80-120	2	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	99	98	80-120	1	30
Dichlorodifluoromethane	2 U	2.	5	ug/l	77	72	47-120	6	30
1,1-Dichloroethane	1 U	1.	5	ug/l	98	97	79-120	1	30

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1 U	1.	5	ug/l	96	95	70-130	1	30
1,1-Dichloroethene	0.8 U	0.8	5	ug/l	100	103	74-123	4	30
cis-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	97	96	80-120	1	30
trans-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	95	95	80-120	0	30
1,2-Dichloropropane	1 U	1.	5	ug/l	93	93	78-120	0	30
1,3-Dichloropropane	1 U	1.	5	ug/l	98	99	80-120	1	30
2,2-Dichloropropane	1 U	1.	5	ug/l	91	90	77-124	2	30
1,1-Dichloropropene	1 U	1.	5	ug/l	98	95	80-120	2	30
cis-1,3-Dichloropropene	1 U	1.	5	ug/l	87	87	80-120	0	30
trans-1,3-Dichloropropene	1 U	1.	5	ug/l	93	92	79-120	0	30
Ethylbenzene	0.8 U	0.8	5	ug/l	98	97	79-120	2	30
Freon 113	2 U	2.	10	ug/l	112	115	69-128	3	30
Freon 133a	2 U	2.	5	ug/l	98	99	77-120	2	30
Hexachlorobutadiene	2 U	2.	5	ug/l	93	96	58-120	3	30
2-Hexanone	3 U	3.	10	ug/l	116	120	65-136	3	30
Isopropylbenzene	1 U	1.	5	ug/l	96	96	77-120	1	30
p-Isopropyltoluene	1 U	1.	5	ug/l	103	102	80-120	1	30
Methyl Tertiary Butyl Ether	0.5 U	0.5	5	ug/l	94	95	76-120	1	30
4-Methyl-2-pentanone	3 U	3.	10	ug/l	97	97	70-121	0	30
Methylene Chloride	2 U	2.	5	ug/l	98	100	80-120	3	30
n-Propylbenzene	1 U	1.	5	ug/l	110	108	80-120	1	30
Styrene	1 U	1.	5	ug/l	97	95	80-120	1	30
1,1,1,2-Tetrachloroethane	1 U	1.	5	ug/l	97	97	80-120	0	30
1,1,2,2-Tetrachloroethane	1 U	1.	5	ug/l	106	107	71-120	1	30
Tetrachloroethene	0.8 U	0.8	5	ug/l	98	97	80-121	1	30
Toluene	0.7 U	0.7	5	ug/l	98	98	79-120	0	30
1,2,3-Trichlorobenzene	1 U	1.	5	ug/l	95	97	65-120	2	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	95	97	67-120	2	30
1,1,1-Trichloroethane	0.8 U	0.8	5	ug/l	98	97	75-127	1	30
1,1,2-Trichloroethane	0.8 U	0.8	5	ug/l	100	100	80-120	0	30
Trichloroethene	1 U	1.	5	ug/l	94	92	80-120	2	30
Trichlorofluoromethane	2 U	2.	5	ug/l	89	89	64-129	0	30
1,2,3-Trichloropropane	1 U	1.	5	ug/l	109	109	80-120	0	30
1,2,4-Trimethylbenzene	1 U	1.	5	ug/l	105	104	74-120	1	30
1,3,5-Trimethylbenzene	1 U	1.	5	ug/l	103	102	75-120	1	30
Vinyl Chloride	1 U	1.	5	ug/l	79	78	65-125	1	30
m+p-Xylene	0.8 U	0.8	5	ug/l	93	93	80-120	1	30
o-Xylene	0.8 U	0.8	5	ug/l	94	94	80-120	0	30

Batch number: 10350WAB026

Sample number(s): 6164944

Aniline	1 U	1.	5	ug/l	67	66	49-101	1	30
Benzidine	20 U	20.	60	ug/l	64	62	20-109	3	30
Benzoic acid	6 U	6.	15	ug/l	30	48	10-69	44*	30
Benzyl alcohol	5 U	5.	15	ug/l	79	91	66-97	14	30
4-Bromophenyl-phenylether	1 U	1.	5	ug/l	86	107	82-117	22	30
Carbazole	1 U	1.	5	ug/l	92	110	81-114	18	30
4-Chloro-3-methylphenol	1 U	1.	5	ug/l	89	112	70-123	22	30
4-Chloroaniline	1 U	1.	5	ug/l	51	58	42-124	14	30
bis(2-Chloroethoxy)methane	1 U	1.	5	ug/l	89	109	74-124	20	30
bis(2-Chloroethyl)ether	1 U	1.	5	ug/l	90	105	77-108	16	30
bis(2-Chloroisopropyl)ether	1 U	1.	5	ug/l	92	105	62-127	13	30
2-Chloronaphthalene	2 U	2.	5	ug/l	77	81	54-132	5	30
2-Chlorophenol	1 U	1.	5	ug/l	91	109*	77-108	18	30
4-Chlorophenyl-phenylether	2 U	2.	5	ug/l	90	111	82-111	21	30
Dibenzofuran	1 U	1.	5	ug/l	91	111*	83-108	20	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	84	94	67-108	12	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	83	93	63-110	12	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	82	93	65-113	12	30

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
3,3'-Dichlorobenzidine	2 U	2.	5	ug/l	53	57	49-111	9	30
2,4-Dichlorophenol	1 U	1.	5	ug/l	96	117*	80-109	20	30
2,4-Dimethylphenol	3 U	3.	10	ug/l	96	117*	72-110	20	30
3,5-Dimethylphenol	3 U	3.	10	ug/l	93	117	70-130	23	30
4,6-Dinitro-2-methylphenol	5 U	5.	15	ug/l	86	102	78-119	17	30
2,4-Dinitrophenol	10 U	10.	30	ug/l	77	91	64-120	16	30
2,4-Dinitrotoluene	1 U	1.	5	ug/l	93	110	81-115	17	30
2,6-Dinitrotoluene	1 U	1.	5	ug/l	90	110	85-115	20	30
1,2-Diphenylhydrazine	1 U	1.	5	ug/l	96	118*	78-116	21	30
Hexachlorobenzene	1 U	1.	5	ug/l	88	108	81-118	20	30
Hexachlorobutadiene	1 U	1.	5	ug/l	81	92	57-124	13	30
Hexachlorocyclopentadiene	5 U	5.	15	ug/l	71	77	10-118	8	30
Hexachloroethane	1 U	1.	5	ug/l	80	91	52-113	13	30
Isophorone	1 U	1.	5	ug/l	91	114	74-117	22	30
2-Methylphenol	1 U	1.	5	ug/l	85	102*	64-101	18	30
4-Methylphenol	2 U	2.	5	ug/l	76	93	61-103	21	30
2-Nitroaniline	1 U	1.	5	ug/l	91	111	83-116	20	30
3-Nitroaniline	1 U	1.	5	ug/l	88	101	74-113	14	30
4-Nitroaniline	1 U	1.	5	ug/l	74	82	59-100	11	30
Nitrobenzene	1 U	1.	5	ug/l	90	104	75-109	14	30
2-Nitrophenol	1 U	1.	5	ug/l	91	108	86-120	18	30
4-Nitrophenol	10 U	10.	30	ug/l	44	53	16-78	19	30
N-Nitroso-di-n-propylamine	1 U	1.	5	ug/l	89	108	69-110	19	30
N-Nitrosodiphenylamine	2 U	2.	5	ug/l	91	111	67-136	20	30
Pentachlorophenol	3 U	3.	15	ug/l	75	84	53-110	12	30
Phenol	1 U	1.	5	ug/l	40	47	29-67	17	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	85	100	71-112	16	30
2,4,5-Trichlorophenol	1 U	1.	5	ug/l	90	108*	79-107	19	30
2,4,6-Trichlorophenol	1 U	1.	5	ug/l	93	110	81-113	17	30

Batch number: 10350WAH026

Sample number(s): 6164944

Acenaphthene	0.010 U	0.010	0.050	ug/l	75	78	74-109	3	30
Acenaphthylene	0.010 U	0.010	0.050	ug/l	80	82	70-110	3	30
Anthracene	0.010 U	0.010	0.050	ug/l	77	78	66-111	1	30
Benzo(a)anthracene	0.010 U	0.010	0.050	ug/l	78	79	72-114	1	30
Benzo(a)pyrene	0.010 U	0.010	0.050	ug/l	73	79	64-115	8	30
Benzo(b)fluoranthene	0.010 U	0.010	0.050	ug/l	79	75	69-123	5	30
Benzo(g,h,i)perylene	0.010 U	0.010	0.050	ug/l	73	69	68-125	5	30
Benzo(k)fluoranthene	0.010 U	0.010	0.050	ug/l	75	71*	72-122	5	30
Butylbenzylphthalate	0.055 J	0.050	1.0	ug/l	71	73	70-130	2	30
Di-n-butylphthalate	0.050 U	0.050	1.0	ug/l	80	80	70-130	0	30
Chrysene	0.010 U	0.010	0.050	ug/l	75*	77	76-116	2	30
Dibenz(a,h)anthracene	0.010 U	0.010	0.050	ug/l	75	69*	71-125	8	30
Diethylphthalate	0.050 U	0.050	1.0	ug/l	67*	65*	70-130	3	30
Dimethylphthalate	0.050 U	0.050	1.0	ug/l	67*	71	70-130	5	30
Bis(2-Ethylhexyl)phthalate	0.050 U	0.050	1.0	ug/l	86	87	70-130	0	30
Fluoranthene	0.010 U	0.010	0.050	ug/l	78	67*	75-116	16	30
Fluorene	0.010 U	0.010	0.050	ug/l	79	78	75-114	2	30
Indeno(1,2,3-cd)pyrene	0.010 U	0.010	0.050	ug/l	74	69	69-124	7	30
1-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	77	69*	71-117	11	30
2-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	71*	66*	75-115	7	30
Naphthalene	0.010 U	0.010	0.050	ug/l	74	75	72-109	1	30
N-Nitrosodimethylamine	0.010 U	0.010	0.050	ug/l	59*	58*	70-130	1	30
Di-n-octylphthalate	0.050 U	0.050	1.0	ug/l	74	71	70-130	5	30
Phenanthrene	0.010 U	0.010	0.050	ug/l	77	78	76-111	2	30
Pyrene	0.010 U	0.010	0.050	ug/l	72	72	69-118	1	30

Batch number: 10354SLF026

Sample number(s): 6164941-6164942, 6164945-6164957

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Aniline	170 U	170.	500	ug/kg	46		10-107		
Benzidine	1,200 U	1,200.	3,300	ug/kg	42		15-121		
Benzoic acid	170 U	170.	500	ug/kg	92		10-154		
Benzyl alcohol	170 U	170.	500	ug/kg	86		68-111		
4-Bromophenyl-phenylether	17	U 17.	170	ug/kg	93		79-117		
Carbazole	17	U 17.	170	ug/kg	105		77-113		
4-Chloro-3-methylphenol	33	U 33.	170	ug/kg	100		74-119		
4-Chloroaniline	67	U 67.	170	ug/kg	65		10-110		
bis(2-Chloroethoxy)methane	17	U 17.	170	ug/kg	99		70-118		
bis(2-Chloroethyl)ether	17	U 17.	170	ug/kg	87		70-104		
bis(2-Chloroisopropyl)ether	17	U 17.	170	ug/kg	88		68-131		
2-Chloronaphthalene	17	U 17.	170	ug/kg	86		67-127		
2-Chlorophenol	17	U 17.	170	ug/kg	91		72-112		
4-Chlorophenyl-phenylether	33	U 33.	170	ug/kg	97		79-110		
Dibenzofuran	17	U 17.	170	ug/kg	101		79-108		
1,2-Dichlorobenzene	17	U 17.	170	ug/kg	91		79-102		
1,3-Dichlorobenzene	17	U 17.	170	ug/kg	87		70-98		
1,4-Dichlorobenzene	17	U 17.	170	ug/kg	89		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	47		38-105		
2,4-Dichlorophenol	17	U 17.	170	ug/kg	99		75-111		
2,4-Dimethylphenol	33	U 33.	170	ug/kg	100		72-111		
3,5-Dimethylphenol	33	U 33.	170	ug/kg	106		70-130		
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	89		53-110		
2,4-Dinitrophenol	670 U	670.	2,000	ug/kg	88		37-120		
2,4-Dinitrotoluene	33	U 33.	170	ug/kg	107		73-115		
2,6-Dinitrotoluene	17	U 17.	170	ug/kg	105		79-115		
1,2-Diphenylhydrazine	17	U 17.	170	ug/kg	106		77-111		
bis(2-Ethylhexyl)phthalate	17	U 17.	330	ug/kg	106		75-117		
Hexachlorobenzene	17	U 17.	170	ug/kg	99		78-116		
Hexachlorobutadiene	67	U 67.	170	ug/kg	100		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	111		46-115		
Hexachloroethane	17	U 17.	170	ug/kg	93		68-105		
Isophorone	17	U 17.	170	ug/kg	94		69-110		
2-Methylphenol	33	U 33.	170	ug/kg	88		66-110		
4-Methylphenol	33	U 33.	170	ug/kg	88		66-117		
2-Nitroaniline	17	U 17.	170	ug/kg	110		78-116		
3-Nitroaniline	33	U 33.	170	ug/kg	94		62-109		
4-Nitroaniline	67	U 67.	170	ug/kg	69		49-98		
Nitrobenzene	17	U 17.	170	ug/kg	102		71-104		
2-Nitrophenol	17	U 17.	170	ug/kg	98		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	110		56-118		
N-Nitroso-di-n-propylamine	17	U 17.	170	ug/kg	85		63-107		
N-Nitrosodiphenylamine	17	U 17.	170	ug/kg	100		67-141		
Pentachlorophenol	170 U	170.	500	ug/kg	91		35-106		
Phenol	17	U 17.	170	ug/kg	90		58-112		
1,2,4-Trichlorobenzene	17	U 17.	170	ug/kg	98		73-108		
2,4,5-Trichlorophenol	33	U 33.	170	ug/kg	105		76-107		
2,4,6-Trichlorophenol	33	U 33.	170	ug/kg	109		78-111		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10354SLI026	Sample number(s): 6164941-6164942, 6164945-6164957								
Acenaphthene	0.67 U	0.67	1.7	ug/kg	72		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	72		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	75		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	77		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	72		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	81		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	61		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	76		66-137		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	75		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	81*		84-132		
Chrysene	0.33 U	0.33	1.7	ug/kg	77*		79-120		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	61*		62-142		
Diethylphthalate	6.0 U	6.0	18	ug/kg	63*		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	77		70-130		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	88		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	76*		78-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	69*		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	61*		62-141		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	73		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	69		62-120		
Naphthalene	0.67 U	0.67	1.7	ug/kg	71		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	68		39-148		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	72		55-176		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	76		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	88		56-121		
Batch number: 10361SLB026	Sample number(s): 6164941-6164942, 6164945-6164946, 6164957								
N-Nitrosodimethylamine	16.7 U	16.7	33.3	ng/kg	100		70-130		
Batch number: 10349A34B	Sample number(s): 6164941-6164942, 6164945-6164946, 6164957								
9a TPH by EPA 8015B Gas C5-C12	0.2 U	0.2	1.0	mg/kg	79	78	67-119	1	30
Batch number: 10350A94A	Sample number(s): 6164943-6164944								
TPH-GRO S.CA water C5-C12	20 U	20.	50	ug/l	91	100	75-135	10	30
Batch number: 103550019A	Sample number(s): 6164941-6164942, 6164945-6164946, 6164957								
4-Amino-2,6-Dinitrotoluene	75 U	75.	150	ug/kg	106		80-120		
2-Amino-4,6-Dinitrotoluene	50 U	50.	150	ug/kg	107		80-120		
2,6-Diamino-4-nitrotoluene	100 U	100.	300	ug/kg	90	89	54-134	2	30
2,4-Diamino-6-nitrotoluene	100 U	100.	300	ug/kg	90	88	54-134	2	30
1,3-Dinitrobenzene	50 U	50.	150	ug/kg	106		51-171		
2,4-Dinitrotoluene	50 U	50.	150	ug/kg	103		72-135		
2,6-Dinitrotoluene	50 U	50.	150	ug/kg	108		80-120		
HMX	130 U	130.	380	ug/kg	83		74-130		
Nitrobenzene	50 U	50.	150	ug/kg	102		80-120		
Nitroglycerin	1,000 U	1,000.	3,000	ug/kg	94		80-120		
2-Nitrotoluene	100 U	100.	150	ug/kg	108		78-128		
3-Nitrotoluene	130 U	130.	150	ug/kg	109		73-127		
4-Nitrotoluene	100 U	100.	150	ug/kg	107		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
PETN	1,000	1,000.	3,000	ug/kg	106		80-120		
RDX	63	U	63.	ug/kg	106		75-131		
Tetryl	77	U	77.	ug/kg	135		70-168		
1,3,5-Trinitrobenzene	50	U	50.	ug/kg	121		77-137		
2,4,6-Trinitrotoluene	50	U	50.	ug/kg	109		80-120		

Batch number: 103510021A
17a Formaldehyde by 8315A

Sample number(s): 6164941-6164942, 6164945-6164946, 6164957
600 600. 1,500 ug/kg 100 80-126

Batch number: 103500036A

Sample number(s): 6164944

2,4-D	0.16	U	0.16	0.50	ug/l	116	128	45-128	10	30
Dalapon	0.25	U	0.25	1.3	ug/l	81	89	40-100	9	30
2,4-DB	0.30	U	0.30	1.0	ug/l	100	112	41-138	11	30
Dicamba	0.080	U	0.080	0.30	ug/l	124	132	51-144	6	30
Dinoseb	0.10	U	0.10	0.50	ug/l	63	72	23-93	14	30
2,4-DP (Dichlorprop)	0.16	U	0.16	0.50	ug/l	120	136	72-145	13	30
MCPA	300		300.	1,000	ug/l	100	112	69-129	11	30
U										
MCPP	50	U	50.	200	ug/l	112	124	66-132	10	30
2,4,5-T	0.015	U	0.015	0.050	ug/l	108	120	53-141	11	30
2,4,5-TP	0.010	U	0.010	0.050	ug/l	112	116	56-135	4	30

Batch number: 103570025A

Sample number(s): 6164948-6164956

2,4-D	1.2	U	1.2	3.6	ug/kg	144*		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	78		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	97		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	98		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	8*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	119		60-141		
MCPA	76	U	76.	250	ug/kg	90		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	107		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	96		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	98		48-138		

Batch number: 103500020A
6a Perchlorate EPA 6850

Sample number(s): 6164948
2.1 U 2.1 5.0 ug/kg 99 85-115

Batch number: 103500016A

Sample number(s): 6164944

Aldrin	0.0020	U	0.0020	0.010	ug/l	96	101	54-159	5	30
Alpha BHC	0.0030	U	0.0030	0.010	ug/l	101	102	59-146	1	30
Beta BHC	0.0029	U	0.0029	0.010	ug/l	98	101	73-147	3	30
Gamma BHC - Lindane	0.0020	U	0.0020	0.010	ug/l	95	101	68-128	6	30
Chlordane	0.12	U	0.12	0.50	ug/l					
p,p-DDD	0.0050	U	0.0050	0.020	ug/l	100	110	71-139	10	30
p,p-DDE	0.0050	U	0.0050	0.020	ug/l	126	137*	66-130	8	30
p,p-DDT	0.0050	U	0.0050	0.020	ug/l	85	90	53-126	6	30
Delta BHC	0.0029	U	0.0029	0.010	ug/l	103	113	76-148	10	30
Dieldrin	0.0053	U	0.0053	0.020	ug/l	100	100	76-132	0	30
Endosulfan I	0.0043	U	0.0043	0.010	ug/l	78	83	68-128	6	30
Endosulfan II	0.015	U	0.015	0.020	ug/l	90	95	59-144	5	30
Endosulfan Sulfate	0.0058	U	0.0058	0.020	ug/l	95	100	71-142	5	30
Endrin	0.0081	U	0.0081	0.020	ug/l	85	85	52-132	0	30
Endrin Aldehyde	0.020	U	0.020	0.10	ug/l	105	110	68-139	5	20
Endrin Ketone	0.0050	U	0.0050	0.020	ug/l	90	105	69-146	15	30
Heptachlor	0.0026	U	0.0026	0.010	ug/l	93	102	57-126	9	30
Heptachlor Epoxide	0.0023	U	0.0023	0.010	ug/l	98	102	73-156	4	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Methoxychlor	0.030 U	0.030	0.10	ug/l	91	97	52-133	6	30
Mirex	0.085 U	0.085	0.25	ug/l					
Toxaphene	1.0 U	1.0	3.0	ug/l					
Batch number: 103500017A Sample number(s): 6164944									
Aroclor 5432	0.10 U	0.10	0.50	ug/l					
Aroclor 5442	0.10 U	0.10	0.50	ug/l	58*	56*	75-125	4	30
Aroclor 5460	0.10 U	0.10	0.50	ug/l					
PCB-1016	0.10 U	0.10	0.50	ug/l	102	100	68-119	2	30
PCB-1221	0.10 U	0.10	0.50	ug/l					
PCB-1232	0.20 U	0.20	0.50	ug/l					
PCB-1242	0.10 U	0.10	0.50	ug/l					
PCB-1248	0.10 U	0.10	0.50	ug/l					
PCB-1254	0.10 U	0.10	0.50	ug/l					
PCB-1260	0.10 U	0.10	0.50	ug/l	112	112	68-121	0	30
PCB-1262	0.20 U	0.20	0.50	ug/l					
PCB-1268	0.16 U	0.16	0.50	ug/l					
Batch number: 103510029A Sample number(s): 6164948-6164956									
Aldrin	0.066 U	0.066	0.17	ug/kg	87		44-135		
Alpha BHC	0.034 U	0.034	0.17	ug/kg	103		38-130		
Beta BHC	0.060 U	0.060	0.17	ug/kg	88		56-134		
Gamma BHC - Lindane	0.034 U	0.034	0.17	ug/kg	106		46-127		
Chlordane	0.80 U	0.80	3.4	ug/kg					
p,p-DDD	0.066 U	0.066	0.34	ug/kg	104		60-137		
p,p-DDE	0.066 U	0.066	0.34	ug/kg	105		59-141		
p,p-DDT	0.066 U	0.066	0.34	ug/kg	126		54-130		
Delta BHC	0.036 U	0.036	0.17	ug/kg	94		55-144		
Dieldrin	0.066 U	0.066	0.34	ug/kg	101		65-129		
Endosulfan I	0.044 U	0.044	0.17	ug/kg	97		45-123		
Endosulfan II	0.066 U	0.066	0.34	ug/kg	100		63-127		
Endosulfan Sulfate	0.066 U	0.066	0.34	ug/kg	111		72-138		
Endrin	0.066 U	0.066	0.34	ug/kg	118		62-129		
Endrin Aldehyde	0.066 U	0.066	0.34	ug/kg	95		55-132		
Endrin Ketone	0.066 U	0.066	0.34	ug/kg	113		69-139		
Heptachlor	0.060 U	0.060	0.17	ug/kg	121		43-124		
Heptachlor Epoxide	0.034 U	0.034	0.17	ug/kg	103		65-131		
Methoxychlor	0.34 U	0.34	1.7	ug/kg	131*		59-125		
Mirex	0.066 U	0.066	0.34	ug/kg					
Toxaphene	2.2 U	2.2	6.6	ug/kg					
Batch number: 103540019A Sample number(s): 6164941-6164942, 6164945-6164957									
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	58*	55*	75-125	4	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	98		72-120		
PCB-1221	0.50 U	0.50	1.7	ug/kg					
PCB-1232	0.52 U	0.52	1.7	ug/kg					
PCB-1242	0.50 U	0.50	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.33 U	0.33	1.7	ug/kg	116		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 103570006A Sample number(s): 6164941-6164942, 6164945-6164946, 6164957									
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	94		66-113		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	98		66-113		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	100		66-113		
EFH (C30 - C40)	0.40 U	0.40	1.2	mg/kg	89		66-113		
EFH (C8-C11)	0.40 U	0.40	1.2	mg/kg	75		66-113		
Batch number: 103510010A	Sample number(s): 6164941-6164942, 6164945-6164946, 6164957								
Diethylene glycol	5.0 U	5.0	13	mg/kg	79		75-125		
Ethylene glycol	5.0 U	5.0	13	mg/kg	79		75-125		
Propylene glycol	5.0 U	5.0	13	mg/kg	72*		75-125		
Batch number: 103540002A	Sample number(s): 6164941-6164942, 6164945-6164946, 6164957								
Ethanol	100 U	100.	500	ug/kg	87		75-112		
Isopropanol	100 U	100.	500	ug/kg	90		75-125		
Methanol	100 U	100.	500	ug/kg	78		75-134		
Batch number: 103550027A	Sample number(s): 6164941-6164942, 6164945-6164946, 6164957								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	100	102	75-125	2	20
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	104	106	75-125	2	20
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	99	101	75-125	2	20
Batch number: 103511026004A	Sample number(s): 6164941-6164942, 6164945-6164957								
Antimony	0.0600 U	0.0600	0.200	mg/kg	120		11-208		
Arsenic	0.0600 U	0.0600	0.400	mg/kg	101		80-120		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	101		82-118		
Cadmium	0.0774 J	0.0360	0.100	mg/kg	114		82-118		
Chromium	0.120 U	0.120	0.400	mg/kg	103		80-120		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	103		82-118		
Copper	0.0704 J	0.0660	0.400	mg/kg	98		80-120		
Lead	0.0185 J	0.0104	0.200	mg/kg	106		80-120		
Nickel	0.100 U	0.100	0.400	mg/kg	108		80-120		
Silver	0.0120 U	0.0120	0.100	mg/kg	101		66-134		
Thallium	0.0412 J	0.0300	0.100	mg/kg	112		81-119		
Vanadium	0.0507 J	0.0220	0.100	mg/kg	97		90-110		
Zinc	0.560 U	0.560	3.00	mg/kg	101		78-122		
Batch number: 103511026004B	Sample number(s): 6164941-6164942, 6164945-6164957								
Selenium	0.0400 U	0.0400	0.400	mg/kg	95		79-122		
Batch number: 103511026004C	Sample number(s): 6164941-6164942, 6164945-6164957								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	107		78-122		
Batch number: 103511026004D	Sample number(s): 6164941-6164942, 6164945-6164957								
Barium	0.108 U	0.108	0.400	mg/kg	101		79-121		
Batch number: 103515708009	Sample number(s): 6164941-6164942, 6164945-6164957								
Aluminum	5.03 U	5.03	20.0	mg/kg	100		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	94		78-110		
Calcium	6.13 U	6.13	20.0	mg/kg	99		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	109		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	103		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	97		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	104		81-119		
Phosphorus	1.51 J	0.560	10.0	mg/kg	102		80-120		
Potassium	31.3 J	18.0	50.0	mg/kg	95		78-110		
Sodium	37.3 U	37.3	100	mg/kg	97		87-110		
Strontium	0.0620 U	0.0620	0.500	mg/kg	106		79-121		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Tin	1.41 J	1.00	10.0	mg/kg	103		90-114		
Titanium	0.380 U	0.380	1.00	mg/kg	107		80-120		
Zirconium	0.840 U	0.840	5.00	mg/kg	103		80-120		
Batch number: 103515711005	Sample number(s): 6164941-6164942, 6164945-6164957								
Mercury	0.0028 U	0.0028	0.0961	mg/kg	96		88-123		
Batch number: 103545713001	Sample number(s): 6164944								
Mercury	0.000050 U	0.00005	0.00020	mg/l	97		80-120		
Batch number: 103551848003	Sample number(s): 6164944								
Aluminum	0.0834 U	0.0834	0.200	mg/l	96	92	90-112	4	20
Boron	0.0138 U	0.0138	0.0500	mg/l	97	94	90-110	3	20
Calcium	0.0960 J	0.0702	0.200	mg/l	102	99	90-112	3	20
Iron	0.0522 U	0.0522	0.200	mg/l	102	98	90-112	4	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	100	98	80-120	2	20
Magnesium	0.0421 J	0.0172	0.100	mg/l	101	98	89-110	3	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	103	101	90-110	3	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	104	102	80-120	2	20
Potassium	0.239 U	0.239	0.500	mg/l	100	99	85-115	2	20
Sodium	0.433 U	0.433	1.00	mg/l	100	100	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	100	97	90-110	3	20
Tin	0.0098 U	0.0098	0.0200	mg/l	103	101	90-110	2	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	105	102	90-113	3	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	99	80-120	3	20
Batch number: 103556050002A	Sample number(s): 6164944								
Antimony	0.00030 U	0.00030	0.0010	mg/l	105	110	87-110	5	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	99	106	86-111	7	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	108	103	90-112	5	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	105	110	90-114	5	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	98	102	90-118	4	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	101	104	80-120	3	20
Copper	0.00038 U	0.00038	0.0020	mg/l	104	104	90-113	0	20
Lead	0.000052 U	0.00005	0.0010	mg/l	105	107	90-115	2	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	107	109	90-113	2	20
Silver	0.000080 U	0.00008	0.00050	mg/l	107	108	90-115	2	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	101	101	89-116	0	20
Vanadium	0.00016 U	0.00016	0.00050	mg/l	104	108	80-120	4	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	109	105	80-120	4	20
Batch number: 103556050002B	Sample number(s): 6164944								
Selenium	0.00025 U	0.00025	0.0020	mg/l	107	107	85-114	0	20
Batch number: 103556050002C	Sample number(s): 6164944								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	106	103	80-120	2	20
Batch number: 103556050002D	Sample number(s): 6164944								
Barium	0.00038 U	0.00038	0.0020	mg/l	107	106	88-113	1	20
Batch number: 10349113001A	Sample number(s): 6164944								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	99		90-110		
Batch number: 10350196902A	Sample number(s): 6164944								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	100	100	90-110	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10352658701A 7b Perchlorate EPA 314.0	Sample number(s): 6164944 0.70 U 0.70	2.0	ug/l	90	91	85-115	1	20	
Batch number: 10361102202A 21a Cyanide by 9012B	Sample number(s): 6164941-6164942, 6164945 0.13 U 0.13	0.50	mg/kg	105		80-120			
Batch number: 10361102202B 21a Cyanide by 9012B	Sample number(s): 6164946, 6164957 0.13 U 0.13	0.50	mg/kg	105		80-120			
Batch number: 11001243201A 3a Cr VI by EPA 7199	Sample number(s): 6164941-6164942, 6164945-6164957 0.20 U 0.20	1.0	mg/kg	97		80-120			
Batch number: 11005005201A 7a Perchlorate EPA 314.0	Sample number(s): 6164941-6164942, 6164945-6164952 9.0 U 9.0	30.0	ug/kg	100		85-115			
Batch number: 11005005201B 7a Perchlorate EPA 314.0	Sample number(s): 6164953-6164957 9.0 U 9.0	30.0	ug/kg	100		85-115			
Batch number: 11007007201A 11a Anions by 300.0 - Fluoride	Sample number(s): 6164941-6164942, 6164945-6164952 0.80 U 0.80	1.0	mg/kg	104		90-110			
11a Anions by 300.0 - Nitrate	0.80 U 0.80	1.5	mg/kg	104		90-110			
Batch number: 11007007201B 11a Anions by 300.0 - Fluoride	Sample number(s): 6164953-6164957 0.80 U 0.80	1.0	mg/kg	104		90-110			
11a Anions by 300.0 - Nitrate	0.80 U 0.80	1.5	mg/kg	104		90-110			
Batch number: 10350039402B 22a pH by 9045C	Sample number(s): 6164941-6164942, 6164945-6164946 100					95-105			
Batch number: 10350039403A 22a pH by 9045C	Sample number(s): 6164947-6164955			101		95-105			
Batch number: 10350039403B 22a pH by 9045C	Sample number(s): 6164956-6164957			101		95-105			
Batch number: 10350182102B Oxidation Reduction Potential	Sample number(s): 6164941-6164942, 6164945-6164946 100					98-102			
Batch number: 10350182103A Oxidation Reduction Potential	Sample number(s): 6164947-6164955			100		98-102			
Batch number: 10350182103B Oxidation Reduction Potential	Sample number(s): 6164956-6164957			100		98-102			
Batch number: 10350162401A 28a Moisture Content by 160.3	Sample number(s): 6164948-6164956			100		80-120			
Batch number: 10364162402A 28a Moisture Content by 160.3	Sample number(s): 6164942, 6164945-6164947			100		80-120			
Batch number: 10364162402B 28a Moisture Content by 160.3	Sample number(s): 6164941			100		80-120			
Batch number: 11005162401A 28a Moisture Content by 160.3	Sample number(s): 6164957			100		80-120			

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: B103501AA	Sample number(s): 6164941-6164942,6164945-6164947,6164957 UNSPK: 6164946								
Acetone	176		15-210						
Benzene	108		55-143						
Bromobenzene	92		43-139						
Bromochloromethane	98		60-137						
Bromodichloromethane	99		53-136						
Bromoform	87		38-124						
Bromomethane	80		42-168						
2-Butanone	125		37-163						
n-Butylbenzene	100		30-146						
sec-Butylbenzene	100		33-157						
tert-Butylbenzene	94		41-152						
Carbon Tetrachloride	108		45-153						
Chlorobenzene	99		49-135						
Chloroethane	86		39-152						
2-Chloroethyl Vinyl Ether	90		32-139						
Chloroform	106		61-142						
Chloromethane	101		51-163						
2-Chlorotoluene	97		42-146						
4-Chlorotoluene	97		39-145						
1,2-Dibromo-3-chloropropane	78		30-139						
Dibromochloromethane	94		51-128						
1,2-Dibromoethane	92		54-129						
Dibromomethane	97		57-130						
1,2-Dichlorobenzene	94		36-133						
1,3-Dichlorobenzene	92		34-134						
1,4-Dichlorobenzene	93		35-136						
Dichlorodifluoromethane	83		26-151						
1,1-Dichloroethane	108		63-142						
1,2-Dichloroethane	103		68-131						
1,1-Dichloroethene	114		61-149						
cis-1,2-Dichloroethene	105		60-136						
trans-1,2-Dichloroethene	109		59-142						
1,2-Dichloropropane	104		62-135						
1,3-Dichloropropane	97		58-129						
2,2-Dichloropropane	101		53-147						
1,1-Dichloropropene	108		54-145						
cis-1,3-Dichloropropene	91		51-131						
trans-1,3-Dichloropropene	88		49-129						
Ethylbenzene	101		44-141						
Freon 113	115		56-156						
Hexachlorobutadiene	88		10-155						
2-Hexanone	78		32-160						
Isopropylbenzene	100		38-144						
p-Isopropyltoluene	99		29-152						
Methyl Tertiary Butyl Ether	93		55-129						
4-Methyl-2-pentanone	68		46-139						
Methylene Chloride	101		61-141						
n-Propylbenzene	104		39-157						
Styrene	99		35-134						

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,1,1,2-Tetrachloroethane	99		52-130						
1,1,2,2-Tetrachloroethane	87		40-152						
Tetrachloroethene	101		42-149						
Toluene	104		50-146						
1,2,3-Trichlorobenzene	80		10-140						
1,2,4-Trichlorobenzene	81		10-136						
1,1,1-Trichloroethane	107		64-142						
1,1,2-Trichloroethane	95		54-139						
Trichloroethene	103		53-144						
Trichlorofluoromethane	94		47-163						
1,2,3-Trichloropropane	85		45-154						
1,2,4-Trimethylbenzene	98		37-149						
1,3,5-Trimethylbenzene	99		38-150						
Vinyl Chloride	91		50-154						
m+p-Xylene	102		44-137						
o-Xylene	96		42-137						
Batch number: E103502AA	Sample number(s): 6164943-6164944 UNSPK: P165404								
1,4-Dioxane	110	102	50-150	7	30				
Batch number: 10354SLF026	Sample number(s): 6164941-6164942, 6164945-6164957 UNSPK: 6164941								
Aniline	50	54	14-114	8	30				
Benzidine	27*	40	35-141	37*	30				
Benzoic acid	52	49	10-173	6	30				
Benzyl alcohol	80	84	55-123	4	30				
4-Bromophenyl-phenylether	92	94	67-129	2	30				
Carbazole	102	104	64-120	3	30				
4-Chloro-3-methylphenol	89	88	53-130	1	30				
4-Chloroaniline	70	71	23-95	2	30				
bis(2-Chloroethoxy)methane	96	94	54-117	2	30				
bis(2-Chloroethyl)ether	86	90	60-116	5	30				
bis(2-Chloroisopropyl)ether	83	84	55-142	2	30				
2-Chloronaphthalene	84	84	50-141	1	30				
2-Chlorophenol	87	91	73-121	5	30				
4-Chlorophenyl-phenylether	93	95	64-119	2	30				
Dibenzofuran	96	98	71-112	2	30				
1,2-Dichlorobenzene	86	89	66-108	4	30				
1,3-Dichlorobenzene	85	88	63-109	4	30				
1,4-Dichlorobenzene	87	92	53-113	5	30				
3,3'-Dichlorobenzidine	65	68	25-123	6	30				
2,4-Dichlorophenol	94	95	78-117	1	30				
2,4-Dimethylphenol	89	92	56-130	4	30				
3,5-Dimethylphenol	101	100	70-130	2	30				
4,6-Dinitro-2-methylphenol	82	81	10-148	1	30				
2,4-Dinitrophenol	69	61	20-143	13	30				
2,4-Dinitrotoluene	100	98	57-114	2	30				
2,6-Dinitrotoluene	99	104	69-123	5	30				
1,2-Diphenylhydrazine	102	105	71-129	3	30				
bis(2-Ethylhexyl)phthalate	107	103	63-122	5	30				
Hexachlorobenzene	96	98	61-111	2	30				
Hexachlorobutadiene	99	99	62-120	0	30				
Hexachlorocyclopentadiene	97	108	10-153	11	30				
Hexachloroethane	89	94	57-109	6	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Isophorone	90	90	51-118	0	30				
2-Methylphenol	81	86	47-142	6	30				
4-Methylphenol	78	84	55-126	7	30				
2-Nitroaniline	106	103	67-125	3	30				
3-Nitroaniline	98	98	59-122	0	30				
4-Nitroaniline	73	77	52-112	5	30				
Nitrobenzene	99	99	51-114	0	30				
2-Nitrophenol	93	94	74-115	0	30				
4-Nitrophenol	102	101	39-133	1	30				
N-Nitroso-di-n-propylamine	78	82	60-116	4	30				
N-Nitrosodiphenylamine	94	99	86-145	5	30				
Pentachlorophenol	76	83	17-149	9	30				
Phenol	86	89	58-126	3	30				
1,2,4-Trichlorobenzene	95	94	72-115	1	30				
2,4,5-Trichlorophenol	97	99	34-139	2	30				
2,4,6-Trichlorophenol	99	98	49-140	1	30				
Batch number: 10354SLI026 Sample number(s): 6164941-6164942, 6164945-6164957 UNSPK: 6164941									
Acenaphthene	75	77	63-105	3	30				
Acenaphthylene	78	80	55-126	2	30				
Anthracene	75	78	46-136	4	30				
Benzo(a)anthracene	78	80	39-144	3	30				
Benzo(a)pyrene	72	77	34-156	8	30				
Benzo(b)fluoranthene	84	85	43-155	2	30				
Benzo(g,h,i)perylene	75	79	33-141	5	30				
Benzo(k)fluoranthene	70	74	42-144	5	30				
Butylbenzylphthalate	84	90	73-140	7	30				
Di-n-butylphthalate	84	87	78-160	3	30				
Chrysene	74	77	29-156	4	30				
Dibenz(a,h)anthracene	74	80	41-130	7	30				
Diethylphthalate	70*	72*	87-131	3	30				
Dimethylphthalate	81	85	74-118	4	30				
Bis(2-Ethylhexyl)phthalate	120	95	39-167	24	30				
Fluoranthene	77	80	26-166	4	30				
Fluorene	79	81	45-121	3	30				
Indeno(1,2,3-cd)pyrene	74	79	21-143	5	30				
1-Methylnaphthalene	76	78	72-123	3	30				
2-Methylnaphthalene	70	71	28-121	2	30				
Naphthalene	73	75	61-102	2	30				
N-Nitrosodimethylamine	84	83	48-113	0	30				
Di-n-octylphthalate	80	82	40-192	2	30				
Phenanthrene	75	77	12-165	3	30				
Pyrene	73	77	15-153	5	30				
Batch number: 10361SLB026 Sample number(s): 6164941-6164942, 6164945-6164946, 6164957 UNSPK: 6164941									
N-Nitrosodimethylamine	94	88	70-130	5	30				
Batch number: 10349A34B Sample number(s): 6164941-6164942, 6164945-6164946, 6164957 UNSPK: P163871									
9a TPH by EPA 8015B Gas C5-C12	65	66	39-118	0	30				
Batch number: 103550019A Sample number(s): 6164941-6164942, 6164945-6164946, 6164957 UNSPK: P163871									
4-Amino-2,6-Dinitrotoluene	106	107	80-127	1	50				
2-Amino-4,6-Dinitrotoluene	105	105	80-137	0	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,3-Dinitrobenzene	103	103	38-166	1	50				
2,4-Dinitrotoluene	100	101	80-131	0	50				
2,6-Dinitrotoluene	107	107	80-127	0	50				
HMX	81	83	63-128	2	50				
Nitrobenzene	100	100	80-125	0	50				
Nitroglycerin	94	93	80-120	0	50				
2-Nitrotoluene	106	105	80-122	1	50				
3-Nitrotoluene	107	106	72-119	1	50				
4-Nitrotoluene	106	106	80-125	0	50				
PETN	108	107	80-121	0	50				
RDX	97	99	75-129	2	50				
Tetryl	131	135	55-174	3	50				
1,3,5-Trinitrobenzene	118	119	82-126	0	50				
2,4,6-Trinitrotoluene	106	107	82-130	1	50				

Batch number: 103510021A
17a Formaldehyde by 8315A

Sample number(s): 6164941-6164942,6164945-6164946,6164957 UNSPK: P163871
97 99 80-120 2 50

Batch number: 103570025A

Sample number(s): 6164948-6164956 UNSPK: P166190

2,4-D	104	75	28-161	32	35				
Dalapon	87*	82	12-86	6	50				
2,4-DB	184*	119	20-170	43	50				
Dicamba	178*	129*	33-120	32	50				
Dinoseb	15	11	1-44	27	35				
2,4-DP (Dichlorprop)	75	107	55-141	35	50				
MCPA	298*	96	31-184	103*	50				
MCPP (Mecoprop)	126	102	16-174	21	50				
2,4,5-T	71	61	25-132	15	35				
2,4,5-TP	116	83	10-183	33	35				

Batch number: 103500020A
6a Perchlorate EPA 6850

Sample number(s): 6164948 UNSPK: 6164948
100 100 80-120 0 20

Batch number: 103510029A

Sample number(s): 6164948-6164956 UNSPK: P162943

Aldrin	77	87	16-126	12	50				
Alpha BHC	100	109	10-129	9	50				
Beta BHC	88	97	14-147	10	50				
Gamma BHC - Lindane	100	109	10-140	9	50				
p,p-DDD	80	88	16-163	10	50				
p,p-DDE	90	102	18-161	12	50				
p,p-DDT	103	116	10-176	12	50				
Delta BHC	94	106	23-140	13	50				
Dieldrin	76	84	19-154	10	50				
Endosulfan I	76	82	16-137	8	50				
Endosulfan II	70	76	28-154	9	50				
Endosulfan Sulfate	86	94	21-160	9	50				
Endrin	88	99	11-149	11	50				
Endrin Aldehyde	77	87	10-148	12	35				
Endrin Ketone	82	85	22-165	4	50				
Heptachlor	118	136*	13-126	14	50				
Heptachlor Epoxide	81	90	13-157	11	50				
Methoxychlor	102	114	32-147	11	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103540019A	Sample number(s): 6164941-6164942, 6164945-6164957 UNSPK: P162864								
PCB-1016	101	104	29-146	3	50				
PCB-1260	105	111	39-149	5	50				
Batch number: 103570006A	Sample number(s): 6164941-6164942, 6164945-6164946, 6164957 UNSPK: P162942								
EFH (C12-C14)	88	86	49-123	3	20				
EFH (C15-C20)	172*	137*	49-123	23*	20				
EFH (C21-C30)	799*	504*	49-123	29*	20				
EFH (C30 - C40)	1486	1361	49-123	6	20				
	(2)	(2)							
EFH (C8-C11)	61	62	49-123	2	20				
Batch number: 103510010A	Sample number(s): 6164941-6164942, 6164945-6164946, 6164957 UNSPK: 6164941								
Diethylene glycol	60	85	59-109	36*	20				
Ethylene glycol	85	88	63-107	3	20				
Propylene glycol	72	73	63-107	1	20				
Batch number: 103540002A	Sample number(s): 6164941-6164942, 6164945-6164946, 6164957 UNSPK: P163871								
Ethanol	82	84	24-143	3	20				
Isopropanol	84	85	75-125	1	20				
Methanol	75	86	45-136	14	20				
Batch number: 103511026004A	Sample number(s): 6164941-6164942, 6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Antimony	100	84	75-125	12	20	0.150 J	0.133 J	12 (1)	20
Arsenic	292*	228*	75-125	11	20	5.25	7.00	29*	20
Beryllium	197*	149*	75-125	18	20	0.498	0.548	9	20
Cadmium	169*	171*	75-125	3	20	0.0836 J	0.0985	16 (1)	20
Chromium	211*	194*	75-125	3	20	13.2	17.5	28*	20
Cobalt	149*	143*	75-125	1	20	5.28	6.39	19	20
Copper	159*	157*	75-125	1	20	5.42	7.10	27*	20
Lead	257*	229*	75-125	5	20	4.41	5.87	28*	20
Nickel	172*	164*	75-125	1	20	7.94	10.3	26*	20
Silver	173*	163*	75-125	3	20	0.0139 J	0.0186 J	30* (1)	20
Thallium	224*	203*	75-125	5	20	0.333	0.408	20 (1)	20
Vanadium	264*	249*	75-125	1	20	27.7	36.5	27*	20
Zinc	365 (2)	304 (2)	75-125	6	20	55.7	75.6	30*	20
Batch number: 103511026004B	Sample number(s): 6164941-6164942, 6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Selenium	93	88	75-125	2	20	0.0948 J	0.120 J	24* (1)	20
Batch number: 103511026004C	Sample number(s): 6164941-6164942, 6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Molybdenum	175*	165*	75-125	3	20	0.441	0.608	32* (1)	20
Batch number: 103511026004D	Sample number(s): 6164941-6164942, 6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Barium	472 (2)	400 (2)	75-125	6	20	59.7	83.3	33*	20
Batch number: 103515708009	Sample number(s): 6164941-6164942, 6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Aluminum	1340 (2)	771 (2)	75-125	8	20	11,700	11,000	6	20
Boron	97	97	84-115	0	20	2.79 J	1.89 J	39* (1)	20
Calcium	190 (2)	116 (2)	75-125	8	20	3,000	3,200	6	20
Iron	670 (2)	-620 (2)	75-125	7	20	18,600	18,000	3	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Lithium	104	106	82-114	2	20	21.4	20.7	3	20
Magnesium	358 (2)	250 (2)	75-125	5	20	3,720	3,800	2	20
Manganese	89 (2)	55 (2)	75-125	5	20	295	261	12	20
Phosphorus	95	66*	75-125	7	20	310	298	4	20
Potassium	139*	121	75-125	5	20	2,360	2,300	3	20
Sodium	103	104	75-125	1	20	89.4 J	89.1 J	0 (1)	20
Strontium	100	99	75-115	1	20	11.5	12.0	4	20
Tin	95	94	80-110	1	20	2.59 J	2.31 J	12 (1)	20
Titanium	221 (2)	131 (2)	75-125	7	20	1,140	1,070	7	20
Zirconium	102	105	75-125	3	20	0.832 U	1.01 J	200* (1)	20
Batch number: 103515711005	Sample number(s): 6164941-6164942, 6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Mercury	98	99	65-135	2	20	0.0029 U	0.0028 U	0 (1)	20
Batch number: 10349113001A	Sample number(s): 6164944 UNSPK: P164525 BKG: P164525								
3b Cr VI by EPA 7199	100		59-135			5.0 U	5.0 U	0 (1)	20
Batch number: 10361102202A	Sample number(s): 6164941-6164942, 6164945 UNSPK: P163885 BKG: P163885								
21a Cyanide by 9012B	100		75-125			0.18 U	0.18 U	0 (1)	20
Batch number: 10361102202B	Sample number(s): 6164946, 6164957 UNSPK: 6164946 BKG: 6164946								
21a Cyanide by 9012B	102		75-125			0.17 U	0.18 U	0 (1)	20
Batch number: 11001243201A	Sample number(s): 6164941-6164942, 6164945-6164957 UNSPK: 6164941 BKG: 6164941								
3a Cr VI by EPA 7199	97		75-125			0.30 J	0.41 J	30* (1)	20
Batch number: 11005005201A	Sample number(s): 6164941-6164942, 6164945-6164952 UNSPK: 6164941 BKG: 6164941								
7a Perchlorate EPA 314.0	105		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11005005201B	Sample number(s): 6164953-6164957 UNSPK: 6164953 BKG: 6164953								
7a Perchlorate EPA 314.0	116		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11007007201A	Sample number(s): 6164941-6164942, 6164945-6164952 UNSPK: 6164941 BKG: 6164941								
11a Anions by 300.0 - Fluoride	118		80-120			0.80 U	1.2	200* (1)	20
11a Anions by 300.0 - Nitrate	114		80-120			1.7	1.7	0 (1)	20
Batch number: 11007007201B	Sample number(s): 6164953-6164957 UNSPK: 6164953 BKG: 6164953								
11a Anions by 300.0 - Fluoride	65*		80-120			1.1	0.89 J	24* (1)	20
11a Anions by 300.0 - Nitrate	92		80-120			1.4 J	0.80 U	200* (1)	20
Batch number: 10350039402B	Sample number(s): 6164941-6164942, 6164945-6164946 BKG: 6164946								
22a pH by 9045C						8.25	8.21	0	1
Batch number: 10350039403A	Sample number(s): 6164947-6164955 BKG: 6164947								
22a pH by 9045C						7.08	7.11	0	1
Batch number: 10350039403B	Sample number(s): 6164956-6164957 BKG: 6164957								
22a pH by 9045C						7.41	7.43	0	1
Batch number: 10350182102B	Sample number(s): 6164941-6164942, 6164945-6164946 BKG: 6164946								
Oxidation Reduction Potential						426	428	1	6
Batch number: 10350182103A	Sample number(s): 6164947-6164955 BKG: 6164947								

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Oxidation Reduction Potential						381	381	0	6
Batch number: 10350182103B	Sample number(s): 6164956-6164957					BKG: 6164957			
Oxidation Reduction Potential						423	420	1	6
Batch number: 10350162401A	Sample number(s): 6164948-6164956					BKG: P154843			
28a Moisture Content by 160.3						12.4	13.1	6	20
Batch number: 10364162402A	Sample number(s): 6164942, 6164945-6164947					BKG: P167525			
28a Moisture Content by 160.3						11.9	12.1	1	20
Batch number: 10364162402B	Sample number(s): 6164941					BKG: P163871			
28a Moisture Content by 160.3						11.4	11.7	3	20
Batch number: 11005162401A	Sample number(s): 6164957					BKG: P168986			
28a Moisture Content by 160.3						10.0	9.9	1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B

Batch number: B103501AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6164941	103	99	97	92
6164942	105	102	98	90
6164945	105	101	98	91
6164946	104	99	98	91
6164947	104	100	97	93
6164957	104	99	97	92
Blank	104	101	97	93
LCS	100	103	99	100
LCSD	99	102	100	100
MS	100	97	102	101
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM

Batch number: E103502AA

	Toluene-d8
6164943	101
6164944	101
Blank	99
LCS	100
MS	101
MSD	100

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Quality Control Summary

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Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Surrogate Quality Control

Limits: 80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM
Batch number: E103511AA
Toluene-d8

6164941	98
6164942	99
6164945	98
6164946	99
6164947	75
6164957	99
Blank	100
LCS	99
LCSD	100

Limits: 70-130

Analysis Name: 1b Volatile Organics EPA8260
Batch number: Y103512AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6164944	100	97	102	100
Blank	100	98	101	99
LCS	100	101	104	103
LCSD	97	97	103	102

Limits: 86-118 80-120 88-110 86-115

Analysis Name: 5b Semivolatiles by EPA 8270C
Batch number: 10350WAB026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164944	46	31	81	79	79	78
Blank	53	36	81	84	81	83
LCS	59	40	86	85	86	83
LCSD	71	48	103	102	105	99

Limits: 20-130 20-120 30-130 40-130 45-130 45-135

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 10350WAH026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164944	96	70	75
Blank	78	71	76
LCS	80	72	71
LCSD	69	70	72

Limits: 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10354SLF026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164941	84	85	92	82	92	85
6164942	81	83	92	79	89	81

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Group Number: 1225546

Surrogate Quality Control

6164945	80	82	89	79	91	83
6164946	82	85	90	80	93	84
6164947	82	85	90	78	92	85
6164948	90	89	101	85	96	86
6164949	89	90	98	83	95	86
6164950	89	91	101	83	94	92
6164951	80	80	96	80	92	83
6164952	84	86	101	81	94	87
6164953	85	83	89	76	86	94
6164954	97	96	97	84	98	99
6164955	94	92	104	82	90	97
6164956	97	94	103	82	93	105
6164957	92	89	103	79	89	96
Blank	91	93	97	82	96	86
LCS	88	87	107	93	95	88
MS	82	84	98	90	92	84
MSD	85	88	99	90	94	85

Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10354SLI026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164941	69	64	75
6164942	73	67	79
6164945	76	72	79
6164946	63	68	76
6164947	75	73	77
6164948	79	70	74
6164949	81	80	77
6164950	84	75	68
6164951	75	70	91
6164952	75	71	74
6164953	75	71	72
6164954	75	69	70
6164955	81	73	72
6164956	80	71	71
6164957	78	71	75
Blank	76	72	78
LCS	74	67	88
MS	80	76	78
MSD	79	73	77

Limits:	40-130	45-130	45-135

Analysis Name: 19a NDMA by 1625C
Batch number: 10361SLB026

N-Nitrosodimethylamine-
d6

6164941	101
6164942	107
6164945	141
6164946	109
6164957	103
Blank	106

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Surrogate Quality Control

LCS 108
MS 101
MSD 113

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 10349A34B
Trifluorotoluene-F

6164941 91
6164942 83
6164945 88
6164946 92
6164957 80
Blank 96
LCS 102
LCSD 99
MS 80
MSD 79

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 10350A94A
Trifluorotoluene-F

6164943 85
6164944 89
Blank 85
LCS 96
LCSD 99

Limits: 63-135

Analysis Name: 12b Pesticides by 8081A
Batch number: 103500016A
Tetrachloro-m-xylene Decachlorobiphenyl

6164944	101	84
Blank	103	97
LCS	99	86
LCSD	104	91

Limits: 52-141 40-144

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 103500017A
Tetrachloro-m-xylene Decachlorobiphenyl

6164944	119	120
Blank	123	119
LCS	117	114
LCSD	120	116

Limits: 30-150 45-120

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Surrogate Quality Control

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 103500036A
2,4-Dichlorophenylacetic
acid

6164944	85
Blank	90
LCS	107
LCSD	112

Limits: 35-144

Analysis Name: 17a Formaldehyde by 8315A
Batch number: 103510021A
Butyraldehyde

6164941	99
6164942	109
6164945	110
6164946	97
6164957	99
Blank	100
LCS	105
MS	105
MSD	104

Limits: 64-126

Analysis Name: 12a Pesticides by 8081A
Batch number: 103510029A
Tetrachloro-m-xylene Decachlorobiphenyl

6164948	89	19*
6164949	79	34
6164950	79	0*
6164951	89	56
6164952	70	69
6164953	75	46
6164954	79	59
6164955	73	68
6164956	86	112
Blank	85	105
LCS	81	107
MS	81	80
MSD	89	79

Limits: 50-130 20-120

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103540019A
Tetrachloro-m-xylene Decachlorobiphenyl

6164941	111	121*
6164942	98	120
6164945	101	118
6164946	69	91
6164947	97	120

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Surrogate Quality Control

6164948	118	142*
6164949	116	132*
6164950	50*	84
6164951	120	127*
6164952	128	151*
6164953	88	129*
6164954	81	118
6164955	122	155*
6164956	195*	185*
6164957	135	151*
Blank	99	105
LCS	110	115
LCSD	102	106
MS	114	104
MSD	116	107

Limits: 53-139 45-120

Analysis Name: 20a Energetics by 8330A
Batch number: 103550019A
2-Nitro-m-xylene

6164941	108
6164942	110
6164945	106
6164946	105
6164957	102
Blank	112
LCS	105
LCSD	102
MS	108
MSD	105

Limits: 80-146

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103570025A
2,4-Dichlorophenylacetic acid

6164948	128
6164949	107
6164950	231*
6164951	178*
6164952	157*
6164953	193*
6164954	162*
6164955	100
6164956	377*
Blank	85
LCS	97
MS	130
MSD	127

Limits: 36-156

Analysis Name: 27a Glycols by 8015B

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Surrogate Quality Control

Batch number: 103510010A
Tetramethylene glycol

6164941	70
6164942	79
6164945	70
6164946	81
6164957	88
Blank	95
LCS	92
MS	117
MSD	98

Limits: 50-119

Analysis Name: 25a Alcohols by 8015B
Batch number: 103540002A
Acetone

6164941	94
6164942	85
6164945	84
6164946	87
6164957	91
Blank	93
LCS	90
MS	82
MSD	85

Limits: 42-138

Analysis Name: 26a Terphenyls by 8015B
Batch number: 103550027A
n-Triacontane-d62

6164941	97
6164942	94
6164945	90
6164946	93
6164957	97
Blank	99
LCS	96
LCSD	97

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 103570006A
Chlorobenzene Orthoterphenyl

6164941	79	88
6164942	78	85
6164945	70	82
6164946	70	82
6164957	73	86
Blank	87	94
LCS	85	94

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/19/11 at 11:07 AM

Group Number: 1225546

Surrogate Quality Control

MS	91	96
MSD	89	97
Limits:	37-125	47-145

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

CHAIN OF CUSTODY RECORD

[illegible]

TO: Nicole Maljovec

FROM: Ann Marie Crites

DATE: 12/15/10

RE: Missing Encore samples

Nicole,

Be advised that two Encore samples, SL-004-SA5C-SB-4.5 and SL-004-SA5C-SB-9.5, were inadvertently missed in the shipment of 12/14/10. These samples are included in today's shipment, under COC.

If you have an questions regarding these samples or this shipment, feel free to contact me.

Sincerely,

Ann Marie Crites, Sample Manager

CDM

Santa Susana Field Laboratory

406-422-8139

A handwritten signature in black ink, appearing to read 'AMCrites', is positioned to the right of the typed name and title.

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD																				Other Instructions and Notes		
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP						VOC/EPA 8260B	1,4-Dioxane EPA 8260M	SVOC EPA 8270C & PAHs EPA 8270 SM	TPH-GRO EPA 8015B	TPH-LPH EPA 8015B Mod.	**Metals EPA 8010/6010B/777A	**Hex Chrome EPA 7199*	**Barium EPA 300.0	**Cadmium EPA 8022	**Cobalt/Euran EPA 1639B	**Copper EPA 314.0	Perchlorate Confirmation by EPA 8550	**Pesticides EPA 8081A (surface soil only)	**Nitrites EPA 300.0	**Formaldehyde EPA 8315A	**p-NDMA EPA 1624C	**Emergent EPA 8300A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B		**Glycols EPA 8015B	**Alcohols EPA 8015B
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																							
SL-002-SASC-SB-4.0-5.0	12.14.10	0942	soil	none	3 x 4 oz. jars & 3 16 oz. jars				X																			
SL-002-SASC-SB-9.0-10.0	12.14.10	0950	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars				X																			
TB-121410	12.14.10	0800	water	HCl	2-40 mL VOA vials	X	X		X																			trip blank
EB02-SASB-121410	12.14.10	1230	water	none	6-1 liter ambers			X						X	X			X	X									rinsate
EB02-SASB-121410	12.14.10	1230	water	none	1-500 ml poly							X	X			X												rinsate
EB02-SASB-121410	12.14.10	1230	water	HNO3	1-500 ml poly						X																	rinsate
EB02-SASB-121410	12.14.10	1230	water	HCl	6-40 mL amber VOA vials	X	X		X																			rinsate
SL-002-SASC-SB-9.5	12.14.10	0948	soil	none	5 Encore Samplers	X	X		X																			
SL-002-SASC-SB-4.5	12.14.10	0938	soil	none	5 Encore Samplers	X	X		X																			
SL-004-SASC-SB-4.5	12.14.10	1104	soil	none	5 Encore Samplers	X	X		X																			
SL-004-SASC-SB-9.5	12.14.10	1115	soil	none	5 Encore Samplers	X	X		X																			
SL-004-SASC-SB-9.0-10.0	12.14.10	1118	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	
SL-004-SASC-SB-4.0-5.0	12.14.10	1111	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	
SL-140-SASC-SB-3.0-4.0	12.14.10	1428	soil	none	2 x 16 oz. jars			X		X	X	X	X	X	X													
SL-140-SASC-SB-3.5	12.14.10	1425	soil	none	5 Encore Samplers	X	X																					
DUP05-SASB-QC-121410	12.14.10	0850	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									DUP
SL-120-SASB-SS-0.0-0.5MS	12.14.10	0847	soil	none	2 x 16 oz. jars & 2 6" sleeves			X		X	X	X	X	X	X	X		X	X									MS/MSD
SL-108-SASB-SS-0.0-0.5	12.14.10	0855	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-119-SASB-SS-0.0-0.5	12.14.10	0830	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-240-SASB-SS-0.0-0.5	12.14.10	0933	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-109-SASB-SS-0.0-0.5	12.14.10	0909	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-122-SASB-SS-0.0-0.5	12.14.10	0940	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-121-SASB-SS-0.0-0.5	12.14.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-054-SASB-SS-0.0-0.5	12.14.10	0921	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-105-SASB-SS-0.0-0.5	12.14.10	0835	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-098-SASB-SS-0.0-0.5	12.14.10	1043	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-142-SASB-SS-0.0-0.5	12.14.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-143-SASB-SS-0.0-0.5	12.14.10	1115	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-123-SASB-SS-0.0-0.5	12.14.10	1040	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-124-SASB-SS-0.0-0.5	12.14.10	1100	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-309-SASB-SS-0.0-0.5	12.14.10	1325	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-311-SASB-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-310-SASB-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-312-SASB-SS-0.0-0.5	12.14.10	1427	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SED-025-SIV-SD-0.0-0.5	12.14.10	1244	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SED-024-SIV-SD-0.0-0.5	12.14.10	1116	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SED-023-SIV-SD-0.0-0.5	12.14.10	0919	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SED-022-SIV-SD-0.0-0.5	12.14.10	1008	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-125-SASB-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-126-SASB-SS-0.0-0.5	12.14.10	1420	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-129-SASB-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-128-SASB-SS-0.0-0.5	12.14.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SED-027-SIV-SD-0.0-0.5	12.14.10	1559	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SED-026-SIV-SD-0.0-0.5	12.14.10	1522	soil	none	1 x 16 oz. jar & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X									
SL-060-SASC-SB-10.0-11.0	12.14.10	1618	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	
SL-060-SASC-SB-10.5	12.14.10	1614	soil	none	5 Encore Samplers	X	X		X																			
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)		Date/Time	Laboratory: Lancaster Laboratories, Inc.																							
Received by: (Signature)	Date/Time	Lab. No.			No. of coolers = 5																							
		00732992																										
		Tracking Number 869514317156																										

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 02, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/15/2010

Group Number: 1225550

SDG: DX023

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-002-SA5C-SB-4.0-5.0 Soil	6164970
SL-002-SA5C-SB-9.0-10.0 Soil	6164971
EB02-SA5B-121410 Water	6164972
SL-004-SA5C-SB-9.0-10.0 Soil	6164973
SL-004-SA5C-SB-4.0-5.0 Soil	6164974
SL-140-SA5C-SB-3.0-4.0 Soil	6164975
SED-024-SIV-SD-0.0-0.5 Sediment	6164976
SED-023-SIV-SD-0.0-0.5 Sediment	6164977
SED-022-SIV-SD-0.0-0.5 Sediment	6164978
SL-125-SA5B-SS-0.0-0.5 Soil	6164979
SL-126-SA5B-SS-0.0-0.5 Soil	6164980
SL-129-SA5B-SS-0.0-0.5 Soil	6164981
SL-128-SA5B-SS-0.0-0.5 Soil	6164982
SED-027-SIV-SD-0.0-0.5 Sediment	6164983
SED-026-SIV-SD-0.0-0.5 Sediment	6164984
SL-060-SA5C-SB-10.0-11.0 Soil	6164985

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO
1 COPY TO CDM Federal Services Program
Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Charles J. Neslund
Manager



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2301 SDG#: DX023-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2301 SDG#: DX023-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0226 JBQ	0.0184	1.07	1
11031	12378-PeCDD	40321-76-4	0.0805 JBQ	0.0271	5.33	1
11031	123478-HxCDD	39227-28-6	0.0232 U	0.0232	5.33	1
11031	123678-HxCDD	57653-85-7	0.124 JB	0.0242	5.33	1
11031	123789-HxCDD	19408-74-3	0.141 JB	0.0244	5.33	1
11031	1234678-HpCDD	35822-46-9	0.233 JBQ	0.0322	5.33	1
11031	OCDD	3268-87-9	0.786 JB	0.0433	10.7	1
11031	2378-TCDF	51207-31-9	0.0199 JBQ	0.0167	1.07	1
11031	12378-PeCDF	57117-41-6	0.0462 JBQ	0.0107	5.33	1
11031	23478-PeCDF	57117-31-4	0.0561 JB	0.0106	5.33	1
11031	123478-HxCDF	70648-26-9	0.0426 JB	0.0155	5.33	1
11031	123678-HxCDF	57117-44-9	0.0577 JBQ	0.0143	5.33	1
11031	123789-HxCDF	72918-21-9	0.0878 JBQ	0.0186	5.33	1
11031	234678-HxCDF	60851-34-5	0.0787 JB	0.0148	5.33	1
11031	1234678-HpCDF	67562-39-4	0.172 JB	0.0154	5.33	1
11031	1234789-HpCDF	55673-89-7	0.0860 JBQ	0.0220	5.33	1
11031	OCDF	39001-02-0	0.207 JB	0.0350	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2301 SDG#: DX023-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2301 SDG#: DX023-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 17:06	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2302 SDG#: DX023-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2302 SDG#: DX023-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0168 U	0.0168	1.20	1
11031	12378-PeCDD	40321-76-4	0.0240 U	0.0240	6.00	1
11031	123478-HxCDD	39227-28-6	0.0267 JBQ	0.0196	6.00	1
11031	123678-HxCDD	57653-85-7	0.0815 JB	0.0198	6.00	1
11031	123789-HxCDD	19408-74-3	0.139 JB	0.0190	6.00	1
11031	1234678-HpCDD	35822-46-9	0.277 JBQ	0.0257	6.00	1
11031	OCDD	3268-87-9	1.30 JB	0.0373	12.0	1
11031	2378-TCDF	51207-31-9	0.0192 JBQ	0.0154	1.20	1
11031	12378-PeCDF	57117-41-6	0.0438 JBQ	0.00852	6.00	1
11031	23478-PeCDF	57117-31-4	0.0560 JB	0.00912	6.00	1
11031	123478-HxCDF	70648-26-9	0.0487 JB	0.0150	6.00	1
11031	123678-HxCDF	57117-44-9	0.0378 JB	0.0122	6.00	1
11031	123789-HxCDF	72918-21-9	0.160 JB	0.0168	6.00	1
11031	234678-HxCDF	60851-34-5	0.0442 JB	0.0139	6.00	1
11031	1234678-HpCDF	67562-39-4	0.119 JB	0.00996	6.00	1
11031	1234789-HpCDF	55673-89-7	0.0608 JB	0.0174	6.00	1
11031	OCDF	39001-02-0	0.169 JBQ	0.0365	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2302 SDG#: DX023-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2302 SDG#: DX023-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 18:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164972
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2303 SDG#: DX023-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.919 U	0.919	1.96	1
10915	12378-PeCDD	40321-76-4	0.535 U	0.535	9.82	1
10915	123478-HxCDD	39227-28-6	0.317 JBQ	0.224	9.82	1
10915	123678-HxCDD	57653-85-7	0.228 U	0.228	9.82	1
10915	123789-HxCDD	19408-74-3	0.238 U	0.238	9.82	1
10915	1234678-HpCDD	35822-46-9	1.24 JBQ	0.302	9.82	1
10915	OCDD	3268-87-9	3.54 JBQ	0.345	19.6	1
10915	2378-TCDF	51207-31-9	0.256 U	0.256	1.96	1
10915	12378-PeCDF	57117-41-6	0.387 JBQ	0.193	9.82	1
10915	23478-PeCDF	57117-31-4	0.707 JBQ	0.164	9.82	1
10915	123478-HxCDF	70648-26-9	0.429 JBQ	0.171	9.82	1
10915	123678-HxCDF	57117-44-9	0.244 JBQ	0.169	9.82	1
10915	123789-HxCDF	72918-21-9	0.633 JBQ	0.175	9.82	1
10915	234678-HxCDF	60851-34-5	0.432 JBQ	0.163	9.82	1
10915	1234678-HpCDF	67562-39-4	1.40 JBQ	0.118	9.82	1
10915	1234789-HpCDF	55673-89-7	0.257 JBQ	0.141	9.82	1
10915	OCDF	39001-02-0	1.35 JBQ	0.309	19.6	1

The recoveries of several labeled compounds were outside QC limits in this sample and the blank and OPR associated with this sample. The sample was re-extracted outside the project specified holding time with all labeled compound recoveries within QC specification. Comparable native compound results were observed between the two extractions.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	11	25 - 164
13C12-12378-PeCDD	28	25 - 181
13C12-123478-HxCDD	36	32 - 141
13C12-123678-HxCDD	34	28 - 130
13C12-123789-HxCDD	33	28 - 130
13C12-1234678-HpCDD	39	23 - 140
13C12-OCDD	38	17 - 157
13C12-2378-TCDF	38	24 - 169
13C12-12378-PeCDF	39	24 - 185
13C12-23478-PeCDF	43	21 - 178
13C12-123478-HxCDF	37	26 - 152
13C12-123678-HxCDF	36	26 - 123
13C12-234678-HxCDF	38	28 - 136
13C12-123789-HxCDF	41	29 - 147
13C12-1234678-HpCDF	39	28 - 143
13C12-1234789-HpCDF	38	26 - 138
13C12-OCDF	37	17 - 157
13C12-1278-TCDD (CRS)	22	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164972
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2303 SDG#: DX023-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
E	Exceeds calibration range					
C	Confirmed quantitation on secondary GC column					
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	10362001	12/30/2010 18:22	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	10362001	12/28/2010 06:30	Ginelle L Haines	1



Analysis Report

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Page 1 of 4

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2304 SDG#: DX023-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2304 SDG#: DX023-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0213 U	0.0213	1.20	1
11031	12378-PeCDD	40321-76-4	0.0388 JBQ	0.0296	6.01	1
11031	123478-HxCDD	39227-28-6	0.0292 JBQ	0.0202	6.01	1
11031	123678-HxCDD	57653-85-7	0.105 JBQ	0.0206	6.01	1
11031	123789-HxCDD	19408-74-3	0.179 JBQ	0.0210	6.01	1
11031	1234678-HpCDD	35822-46-9	0.407 JB	0.0300	6.01	1
11031	OCDD	3268-87-9	2.29 JB	0.0376	12.0	1
11031	2378-TCDF	51207-31-9	0.0294 JB	0.0213	1.20	1
11031	12378-PeCDF	57117-41-6	0.0580 JBQ	0.0105	6.01	1
11031	23478-PeCDF	57117-31-4	0.0956 JBQ	0.0114	6.01	1
11031	123478-HxCDF	70648-26-9	0.0588 JBQ	0.0160	6.01	1
11031	123678-HxCDF	57117-44-9	0.0610 JBQ	0.0133	6.01	1
11031	123789-HxCDF	72918-21-9	0.176 JB	0.0212	6.01	1
11031	234678-HxCDF	60851-34-5	0.107 JBQ	0.0154	6.01	1
11031	1234678-HpCDF	67562-39-4	0.234 JBQ	0.0117	6.01	1
11031	1234789-HpCDF	55673-89-7	0.0830 JBQ	0.0218	6.01	1
11031	OCDF	39001-02-0	0.329 JB	0.0425	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2304 SDG#: DX023-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2304 SDG#: DX023-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 19:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2305 SDG#: DX023-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2305 SDG#: DX023-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0194 JBQ	0.0172	1.19	1
11031	12378-PeCDD	40321-76-4	0.0257 U	0.0257	5.97	1
11031	123478-HxCDD	39227-28-6	0.0166 JBQ	0.0136	5.97	1
11031	123678-HxCDD	57653-85-7	0.0419 JBQ	0.0140	5.97	1
11031	123789-HxCDD	19408-74-3	0.0354 JBQ	0.0136	5.97	1
11031	1234678-HpCDD	35822-46-9	0.176 JBQ	0.0248	5.97	1
11031	OCDD	3268-87-9	0.629 JBQ	0.0368	11.9	1
11031	2378-TCDF	51207-31-9	0.0142 U	0.0142	1.19	1
11031	12378-PeCDF	57117-41-6	0.00859 U	0.00859	5.97	1
11031	23478-PeCDF	57117-31-4	0.0602 JB	0.00895	5.97	1
11031	123478-HxCDF	70648-26-9	0.0414 JB	0.0113	5.97	1
11031	123678-HxCDF	57117-44-9	0.0260 JBQ	0.00943	5.97	1
11031	123789-HxCDF	72918-21-9	0.0640 JBQ	0.0138	5.97	1
11031	234678-HxCDF	60851-34-5	0.0394 JBQ	0.0107	5.97	1
11031	1234678-HpCDF	67562-39-4	0.104 JBQ	0.00979	5.97	1
11031	1234789-HpCDF	55673-89-7	0.0625 JB	0.0169	5.97	1
11031	OCDF	39001-02-0	0.148 JBQ	0.0298	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	52	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2305 SDG#: DX023-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2305 SDG#: DX023-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 19:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2306 SDG#: DX023-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2306 SDG#: DX023-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0257 U	0.0257	1.11	1
11031	12378-PeCDD	40321-76-4	0.0347 U	0.0347	5.56	1
11031	123478-HxCDD	39227-28-6	0.0187 U	0.0187	5.56	1
11031	123678-HxCDD	57653-85-7	0.0195 U	0.0195	5.56	1
11031	123789-HxCDD	19408-74-3	0.0405 JBQ	0.0201	5.56	1
11031	1234678-HpCDD	35822-46-9	0.117 JB	0.0288	5.56	1
11031	OCDD	3268-87-9	0.507 JBQ	0.0492	11.1	1
11031	2378-TCDF	51207-31-9	0.0185 U	0.0185	1.11	1
11031	12378-PeCDF	57117-41-6	0.0234 JBQ	0.0120	5.56	1
11031	23478-PeCDF	57117-31-4	0.0581 JBQ	0.0125	5.56	1
11031	123478-HxCDF	70648-26-9	0.0325 JBQ	0.0155	5.56	1
11031	123678-HxCDF	57117-44-9	0.0200 JBQ	0.0131	5.56	1
11031	123789-HxCDF	72918-21-9	0.0537 JB	0.0210	5.56	1
11031	234678-HxCDF	60851-34-5	0.0404 JBQ	0.0147	5.56	1
11031	1234678-HpCDF	67562-39-4	0.108 JB	0.0140	5.56	1
11031	1234789-HpCDF	55673-89-7	0.0727 JB	0.0253	5.56	1
11031	OCDF	39001-02-0	0.189 JBQ	0.0436	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	63	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	65	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	43	17 - 157
13C12-1278-TCDD (CRS)	64	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2306 SDG#: DX023-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2306 SDG#: DX023-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 20:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2307 SDG#: DX023-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2307 SDG#: DX023-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0556 JB	0.0249	1.15	1
11031	12378-PeCDD	40321-76-4	0.333 JBQ	0.0529	5.73	1
11031	123478-HxCDD	39227-28-6	0.159 JB	0.0253	5.73	1
11031	123678-HxCDD	57653-85-7	0.441 JB	0.0267	5.73	1
11031	123789-HxCDD	19408-74-3	0.430 JB	0.0267	5.73	1
11031	1234678-HpCDD	35822-46-9	5.00 JB	0.0328	5.73	1
11031	OCDD	3268-87-9	32.0 B	0.0354	11.5	1
11031	2378-TCDF	51207-31-9	0.324 JB	0.0493	1.15	1
11031	12378-PeCDF	57117-41-6	0.275 JB	0.0205	5.73	1
11031	23478-PeCDF	57117-31-4	0.583 JB	0.0243	5.73	1
11031	123478-HxCDF	70648-26-9	0.219 JB	0.0170	5.73	1
11031	123678-HxCDF	57117-44-9	0.232 JB	0.0143	5.73	1
11031	123789-HxCDF	72918-21-9	0.0859 JBQ	0.0208	5.73	1
11031	234678-HxCDF	60851-34-5	0.253 JB	0.0158	5.73	1
11031	1234678-HpCDF	67562-39-4	1.22 JB	0.0167	5.73	1
11031	1234789-HpCDF	55673-89-7	0.119 JB	0.0294	5.73	1
11031	OCDF	39001-02-0	2.24 JB	0.0292	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	43	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2307 SDG#: DX023-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2307 SDG#: DX023-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 21:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2308 SDG#: DX023-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2308 SDG#: DX023-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.133 JBQ	0.0315	1.12	1
11031	12378-PeCDD	40321-76-4	0.310 JB	0.0496	5.61	1
11031	123478-HxCDD	39227-28-6	0.223 JB	0.0243	5.61	1
11031	123678-HxCDD	57653-85-7	0.421 JB	0.0252	5.61	1
11031	123789-HxCDD	19408-74-3	0.391 JB	0.0233	5.61	1
11031	1234678-HpCDD	35822-46-9	5.10 JB	0.0324	5.61	1
11031	OCDD	3268-87-9	29.8 B	0.0323	11.2	1
11031	2378-TCDF	51207-31-9	0.366 JBQ	0.0478	1.12	1
11031	12378-PeCDF	57117-41-6	0.307 JBQ	0.0185	5.61	1
11031	23478-PeCDF	57117-31-4	0.570 JB	0.0187	5.61	1
11031	123478-HxCDF	70648-26-9	0.260 JB	0.0177	5.61	1
11031	123678-HxCDF	57117-44-9	0.215 JB	0.0149	5.61	1
11031	123789-HxCDF	72918-21-9	0.117 JB	0.0192	5.61	1
11031	234678-HxCDF	60851-34-5	0.238 JB	0.0169	5.61	1
11031	1234678-HpCDF	67562-39-4	0.994 JB	0.0165	5.61	1
11031	1234789-HpCDF	55673-89-7	0.132 JBQ	0.0270	5.61	1
11031	OCDF	39001-02-0	1.53 JB	0.0288	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2308 SDG#: DX023-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2308 SDG#: DX023-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 22:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2309 SDG#: DX023-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	7.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2309 SDG#: DX023-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.184	JB 0.0335	1.08	1
11031	12378-PeCDD	40321-76-4	0.532	JB 0.0801	5.41	1
11031	123478-HxCDD	39227-28-6	0.986	JB 0.0528	5.41	1
11031	123678-HxCDD	57653-85-7	5.60	B 0.0543	5.41	1
11031	123789-HxCDD	19408-74-3	1.93	JB 0.0527	5.41	1
11031	1234678-HpCDD	35822-46-9	136	B 0.172	5.41	1
11031	OCDD	3268-87-9	1,310	B 0.113	10.8	1
11031	2378-TCDF	51207-31-9	0.473	JB 0.0584	1.08	1
11031	12378-PeCDF	57117-41-6	0.657	JB 0.0258	5.41	1
11031	23478-PeCDF	57117-31-4	0.792	JB 0.0267	5.41	1
11031	123478-HxCDF	70648-26-9	0.858	JB 0.0446	5.41	1
11031	123678-HxCDF	57117-44-9	1.06	JB 0.0385	5.41	1
11031	123789-HxCDF	72918-21-9	0.176	JB 0.0553	5.41	1
11031	234678-HxCDF	60851-34-5	1.35	JB 0.0424	5.41	1
11031	1234678-HpCDF	67562-39-4	29.1	B 0.0382	5.41	1
11031	1234789-HpCDF	55673-89-7	2.68	JB 0.0724	5.41	1
11031	OCDF	39001-02-0	80.4	B 0.0560	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	45	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2309 SDG#: DX023-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2309 SDG#: DX023-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 23:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2310 SDG#: DX023-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2310 SDG#: DX023-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.135	JBQ 0.0262	1.06	1
11031	12378-PeCDD	40321-76-4	0.843	JB 0.0570	5.28	1
11031	123478-HxCDD	39227-28-6	1.57	JB 0.0528	5.28	1
11031	123678-HxCDD	57653-85-7	3.86	JB 0.0551	5.28	1
11031	123789-HxCDD	19408-74-3	3.20	JB 0.0520	5.28	1
11031	1234678-HpCDD	35822-46-9	116	B 0.134	5.28	1
11031	OCDD	3268-87-9	1,280	B 0.0855	10.6	1
11031	2378-TCDF	51207-31-9	0.276	JBQ 0.0508	1.06	1
11031	12378-PeCDF	57117-41-6	0.659	JB 0.0226	5.28	1
11031	23478-PeCDF	57117-31-4	0.641	JB 0.0235	5.28	1
11031	123478-HxCDF	70648-26-9	0.887	JB 0.0445	5.28	1
11031	123678-HxCDF	57117-44-9	2.54	JB 0.0367	5.28	1
11031	123789-HxCDF	72918-21-9	0.718	JBQ 0.0526	5.28	1
11031	234678-HxCDF	60851-34-5	1.22	JB 0.0422	5.28	1
11031	1234678-HpCDF	67562-39-4	22.0	B 0.0313	5.28	1
11031	1234789-HpCDF	55673-89-7	1.91	JB 0.0560	5.28	1
11031	OCDF	39001-02-0	63.9	B 0.0620	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration



Analysis Report

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Page 3 of 4

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2310 SDG#: DX023-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2310 SDG#: DX023-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 03:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2311 SDG#: DX023-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2311 SDG#: DX023-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.126	JB 0.0193	1.05	1
11031	12378-PeCDD	40321-76-4	0.942	JB 0.0524	5.25	1
11031	123478-HxCDD	39227-28-6	1.87	JB 0.0440	5.25	1
11031	123678-HxCDD	57653-85-7	5.41	B 0.0454	5.25	1
11031	123789-HxCDD	19408-74-3	3.99	JB 0.0459	5.25	1
11031	1234678-HpCDD	35822-46-9	174	B 0.142	5.25	1
11031	OCDD	3268-87-9	1,800	B 0.102	10.5	1
11031	2378-TCDF	51207-31-9	0.318	JB 0.0446	1.05	1
11031	12378-PeCDF	57117-41-6	0.765	JB 0.0192	5.25	1
11031	23478-PeCDF	57117-31-4	0.742	JB 0.0194	5.25	1
11031	123478-HxCDF	70648-26-9	1.23	JB 0.0328	5.25	1
11031	123678-HxCDF	57117-44-9	1.75	JB 0.0297	5.25	1
11031	123789-HxCDF	72918-21-9	0.685	JB 0.0385	5.25	1
11031	234678-HxCDF	60851-34-5	1.23	JB 0.0317	5.25	1
11031	1234678-HpCDF	67562-39-4	33.0	B 0.0398	5.25	1
11031	1234789-HpCDF	55673-89-7	2.06	JB 0.0546	5.25	1
11031	OCDF	39001-02-0	103	B 0.0385	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2311 SDG#: DX023-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2311 SDG#: DX023-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 04:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2312 SDG#: DX023-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2312 SDG#: DX023-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.166 JBQ	0.0211	1.06	1
11031	12378-PeCDD	40321-76-4	1.94 JB	0.0523	5.28	1
11031	123478-HxCDD	39227-28-6	4.08 JB	0.0561	5.28	1
11031	123678-HxCDD	57653-85-7	23.9 B	0.0584	5.28	1
11031	123789-HxCDD	19408-74-3	8.22 B	0.0581	5.28	1
11031	1234678-HpCDD	35822-46-9	949 B	0.271	5.28	1
11031	OCDD	3268-87-9	11,200 EB	0.143	10.6	1
11031	2378-TCDF	51207-31-9	0.330 JB	0.0439	1.06	1
11031	12378-PeCDF	57117-41-6	0.687 JB	0.0197	5.28	1
11031	23478-PeCDF	57117-31-4	0.839 JB	0.0202	5.28	1
11031	123478-HxCDF	70648-26-9	3.48 JB	0.0545	5.28	1
11031	123678-HxCDF	57117-44-9	3.48 JB	0.0468	5.28	1
11031	123789-HxCDF	72918-21-9	1.15 JB	0.0626	5.28	1
11031	234678-HxCDF	60851-34-5	3.93 JB	0.0504	5.28	1
11031	1234678-HpCDF	67562-39-4	195 B	0.0627	5.28	1
11031	1234789-HpCDF	55673-89-7	9.95 B	0.0994	5.28	1
11031	OCDF	39001-02-0	773 B	0.0673	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	78	28 - 136

*=This limit was used in the evaluation of the final result

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2312 SDG#: DX023-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-123789-HxCDF	75	29 - 147			
	13C12-1234678-HpCDF	91	28 - 143			
	13C12-1234789-HpCDF	69	26 - 138			
	13C12-OCDF	60	17 - 157			
	13C12-1278-TCDD (CRS)	78	35 - 197			

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2312 SDG#: DX023-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 05:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2313 SDG#: DX023-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.7	0.50	0.50	1

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2313 SDG#: DX023-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0810 JBQ	0.0186	1.06	1
11031	12378-PeCDD	40321-76-4	0.614 JB	0.0358	5.30	1
11031	123478-HxCDD	39227-28-6	1.09 JB	0.0284	5.30	1
11031	123678-HxCDD	57653-85-7	3.18 JB	0.0292	5.30	1
11031	123789-HxCDD	19408-74-3	2.57 JB	0.0290	5.30	1
11031	1234678-HpCDD	35822-46-9	89.1 B	0.0712	5.30	1
11031	OCDD	3268-87-9	920 B	0.0639	10.6	1
11031	2378-TCDF	51207-31-9	0.293 JB	0.0385	1.06	1
11031	12378-PeCDF	57117-41-6	0.463 JB	0.0160	5.30	1
11031	23478-PeCDF	57117-31-4	0.679 JB	0.0173	5.30	1
11031	123478-HxCDF	70648-26-9	0.674 JB	0.0279	5.30	1
11031	123678-HxCDF	57117-44-9	0.746 JB	0.0234	5.30	1
11031	123789-HxCDF	72918-21-9	0.640 JB	0.0351	5.30	1
11031	234678-HxCDF	60851-34-5	0.796 JB	0.0262	5.30	1
11031	1234678-HpCDF	67562-39-4	13.8 B	0.0232	5.30	1
11031	1234789-HpCDF	55673-89-7	1.01 JB	0.0405	5.30	1
11031	OCDF	39001-02-0	39.3 B	0.0291	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	100	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2313 SDG#: DX023-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2313 SDG#: DX023-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 06:31	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2314 SDG#: DX023-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2314 SDG#: DX023-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.141 JB	0.0358	1.16	1
11031	12378-PeCDD	40321-76-4	0.162 JBQ	0.0573	5.79	1
11031	123478-HxCDD	39227-28-6	0.220 JB	0.0481	5.79	1
11031	123678-HxCDD	57653-85-7	0.721 JB	0.0502	5.79	1
11031	123789-HxCDD	19408-74-3	0.471 JB	0.0476	5.79	1
11031	1234678-HpCDD	35822-46-9	11.3 B	0.0719	5.79	1
11031	OCDD	3268-87-9	148 B	0.0705	11.6	1
11031	2378-TCDF	51207-31-9	0.384 JBQ	0.0671	1.16	1
11031	12378-PeCDF	57117-41-6	0.588 JB	0.0301	5.79	1
11031	23478-PeCDF	57117-31-4	0.736 JB	0.0313	5.79	1
11031	123478-HxCDF	70648-26-9	0.418 JB	0.0505	5.79	1
11031	123678-HxCDF	57117-44-9	0.387 JB	0.0427	5.79	1
11031	123789-HxCDF	72918-21-9	0.375 JB	0.0602	5.79	1
11031	234678-HxCDF	60851-34-5	0.353 JB	0.0473	5.79	1
11031	1234678-HpCDF	67562-39-4	3.24 JB	0.0363	5.79	1
11031	1234789-HpCDF	55673-89-7	0.489 JB	0.0666	5.79	1
11031	OCDF	39001-02-0	8.78 JB	0.0550	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	48	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2314 SDG#: DX023-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2314 SDG#: DX023-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 07:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2315 SDG#: DX023-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2315 SDG#: DX023-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0512	JBQ 0.0133	1.16	1
11031	12378-PeCDD	40321-76-4	0.376	JBQ 0.0331	5.80	1
11031	123478-HxCDD	39227-28-6	0.684	JB 0.0223	5.80	1
11031	123678-HxCDD	57653-85-7	4.59	JB 0.0227	5.80	1
11031	123789-HxCDD	19408-74-3	1.60	JB 0.0213	5.80	1
11031	1234678-HpCDD	35822-46-9	76.7	B 0.0729	5.80	1
11031	OCDD	3268-87-9	1,490	B 0.0773	11.6	1
11031	2378-TCDF	51207-31-9	0.426	JB 0.0383	1.16	1
11031	12378-PeCDF	57117-41-6	1.91	JB 0.0142	5.80	1
11031	23478-PeCDF	57117-31-4	0.871	JB 0.0147	5.80	1
11031	123478-HxCDF	70648-26-9	0.673	JB 0.0182	5.80	1
11031	123678-HxCDF	57117-44-9	0.673	JB 0.0151	5.80	1
11031	123789-HxCDF	72918-21-9	0.377	JB 0.0202	5.80	1
11031	234678-HxCDF	60851-34-5	0.683	JB 0.0173	5.80	1
11031	1234678-HpCDF	67562-39-4	13.4	B 0.0194	5.80	1
11031	1234789-HpCDF	55673-89-7	0.727	JB 0.0302	5.80	1
11031	OCDF	39001-02-0	50.3	B 0.0202	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	67	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2315 SDG#: DX023-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2315 SDG#: DX023-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/17/2011 22:22	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2316 SDG#: DX023-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2316 SDG#: DX023-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0302 JB	0.0161	1.15	1
11031	12378-PeCDD	40321-76-4	0.0657 JBQ	0.0230	5.74	1
11031	123478-HxCDD	39227-28-6	0.0317 JBQ	0.0181	5.74	1
11031	123678-HxCDD	57653-85-7	0.124 JB	0.0186	5.74	1
11031	123789-HxCDD	19408-74-3	0.155 JBQ	0.0188	5.74	1
11031	1234678-HpCDD	35822-46-9	1.38 JB	0.0257	5.74	1
11031	OCDD	3268-87-9	19.0 B	0.0307	11.5	1
11031	2378-TCDF	51207-31-9	0.0138 U	0.0138	1.15	1
11031	12378-PeCDF	57117-41-6	0.0816 JB	0.00907	5.74	1
11031	23478-PeCDF	57117-31-4	0.114 JBQ	0.00987	5.74	1
11031	123478-HxCDF	70648-26-9	0.0766 JBQ	0.0172	5.74	1
11031	123678-HxCDF	57117-44-9	0.0531 JB	0.0145	5.74	1
11031	123789-HxCDF	72918-21-9	0.132 JBQ	0.0202	5.74	1
11031	234678-HxCDF	60851-34-5	0.0566 JB	0.0161	5.74	1
11031	1234678-HpCDF	67562-39-4	0.304 JBQ	0.0156	5.74	1
11031	1234789-HpCDF	55673-89-7	0.0571 JBQ	0.0281	5.74	1
11031	OCDF	39001-02-0	0.536 JBQ	0.0269	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2316 SDG#: DX023-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2316 SDG#: DX023-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 09:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11005162401A	01/05/2011 18:13	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 05:39 PM

Group Number: 1225550

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10350162401A 28a Moisture Content by 160.3	Sample number(s): 6164976-6164984				100		80-120		
Batch number: 10364162402A 28a Moisture Content by 160.3	Sample number(s): 6164971,6164973-6164975				100		80-120		
Batch number: 10364162402B 28a Moisture Content by 160.3	Sample number(s): 6164970				100		80-120		
Batch number: 11005162401A 28a Moisture Content by 160.3	Sample number(s): 6164985				100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 10362001	Sample number(s): 6164972								
2378-TCDD	2.81	1.76	2.00	pg/l	89		67-158		
12378-PeCDD	0.684 J	0.492	10.0	pg/l	96		70-142		
123478-HxCDD	0.485 J	0.235	10.0	pg/l	106		70-164		
123678-HxCDD	0.512 J	0.243	10.0	pg/l	104		76-134		
123789-HxCDD	0.483 J	0.269	10.0	pg/l	106		64-162		
1234678-HpCDD	1.35 J	0.246	10.0	pg/l	108		70-140		
OCDD	2.39 J	0.274	20.0	pg/l	118		78-144		
2378-TCDF	0.181 J	0.166	2.00	pg/l	95		75-158		
12378-PeCDF	0.474 J	0.125	10.0	pg/l	104		80-134		
23478-PeCDF	0.810 J	0.113	10.0	pg/l	102		68-160		
123478-HxCDF	0.599 J	0.136	10.0	pg/l	111		72-134		
123678-HxCDF	0.568 J	0.132	10.0	pg/l	113		84-130		
123789-HxCDF	0.637 J	0.143	10.0	pg/l	111		78-130		
234678-HxCDF	0.505 J	0.136	10.0	pg/l	109		70-156		
1234678-HpCDF	1.41 J	0.122	10.0	pg/l	116		82-122		
1234789-HpCDF	0.582 J	0.148	10.0	pg/l	117		78-138		
OCDF	1.43 J	0.269	20.0	pg/l	122		63-170		
Batch number: 11005001	Sample number(s): 6164970-6164971,6164973-6164985								
2378-TCDD	0.0282 J	0.0170	1.00	ng/kg	106		67-158		
12378-PeCDD	0.0679 J	0.0271	5.00	ng/kg	105		70-142		
123478-HxCDD	0.0533 J	0.0252	5.00	ng/kg	107		70-164		
123678-HxCDD	0.0419 J	0.0257	5.00	ng/kg	106		76-134		
123789-HxCDD	0.0658 J	0.0246	5.00	ng/kg	107		64-162		
1234678-HpCDD	0.225 J	0.0346	5.00	ng/kg	104		70-140		
OCDD	0.570 J	0.0410	10.0	ng/kg	104		78-144		
2378-TCDF	0.0270 J	0.0161	1.00	ng/kg	113		75-158		
12378-PeCDF	0.0507 J	0.0109	5.00	ng/kg	104		80-134		
23478-PeCDF	0.0914 J	0.0120	5.00	ng/kg	107		68-160		
123478-HxCDF	0.0754 J	0.0179	5.00	ng/kg	101		72-134		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 05:39 PM

Group Number: 1225550

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123678-HxCDF	0.0628 J	0.0140	5.00	ng/kg	99		84-130		
123789-HxCDF	0.161 J	0.0212	5.00	ng/kg	102		78-130		
234678-HxCDF	0.0900 J	0.0162	5.00	ng/kg	101		70-156		
1234678-HpCDF	0.149 J	0.0144	5.00	ng/kg	99		82-122		
1234789-HpCDF	0.113 J	0.0296	5.00	ng/kg	101		78-138		
OCDF	0.344 J	0.0458	10.0	ng/kg	103		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10350162401A 28a Moisture Content by 160.3	Sample number(s): 6164976-6164984 BKG: P154843 12.4 13.1 6 20								
Batch number: 10364162402A 28a Moisture Content by 160.3	Sample number(s): 6164971,6164973-6164975 BKG: P167525 11.9 12.1 1 20								
Batch number: 10364162402B 28a Moisture Content by 160.3	Sample number(s): 6164970 BKG: P163871 11.4 11.7 3 20								
Batch number: 11005162401A 28a Moisture Content by 160.3	Sample number(s): 6164985 BKG: P168986 10.0 9.9 1 20								
Batch number: 11005001	Sample number(s): 6164970-6164971,6164973-6164985 UNSPK: P165384								
2378-TCDD	105	103	67-158	2	25				
12378-PeCDD	106	105	70-142	1	25				
123478-HxCDD	106	107	70-164	1	25				
123678-HxCDD	108	104	76-134	4	25				
123789-HxCDD	107	106	64-162	1	25				
1234678-HpCDD	98	106	70-140	7	25				
OCDD	53*	102	78-144	36*	25				
2378-TCDF	109	107	75-158	2	25				
12378-PeCDF	105	105	80-134	1	25				
23478-PeCDF	105	104	68-160	0	25				
123478-HxCDF	102	100	72-134	2	25				
123678-HxCDF	99	100	84-130	0	25				
123789-HxCDF	101	99	78-130	3	25				
234678-HxCDF	101	101	70-156	0	25				
1234678-HpCDF	99	101	82-122	2	25				
1234789-HpCDF	101	101	78-138	0	25				
OCDF	100	105	63-170	4	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B
Batch number: 10362001

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 05:39 PM

Group Number: 1225550

Surrogate Quality Control

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6164972	11*	43	37	36	38	41
Blank	6*	70	67	66	66	69
OPR	10*	63	56	55	57	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6164972	39	38	37	22*	28	36
Blank	64	61	54	11*	32	58
OPR	55	54	48	17*	37	52
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6164972	34	33	39	38	38	39
Blank	54	49	63	55	57	68
OPR	50	46	56	48	51	60
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11005001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6164970	62	73	74	76	73	72
6164971	64	73	72	83	74	69
6164973	66	72	70	83	71	62
6164974	58	70	67	77	68	62
6164975	52	64	63	70	63	55
6164976	63	67	66	74	67	62
6164977	70	81	77	85	78	76
6164978	69	77	73	81	75	66
6164979	73	79	75	85	76	70
6164980	73	82	77	83	78	76
6164981	73	80	76	85	78	75
6164982	70	76	73	84	75	67
6164983	68	76	71	80	73	66
6164984	62	69	70	80	72	67
6164985	71	75	71	82	74	68
Blank	62	63	60	72	63	56
MS	69	79	75	85	76	70
MSD	78	87	84	87	82	84
OPR	63	64	64	73	66	62
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6164970	81	67	56	77	70	73
6164971	92	65	56	75	75	76
6164973	95	61	53	76	74	75

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 05:39 PM

Group Number: 1225550

Surrogate Quality Control

6164974	87	60	52	69	70	71
6164975	78	53	43	64	63	65
6164976	80	55	43	69	66	68
6164977	93	69	57	81	80	80
6164978	89	58	45	78	77	77
6164979	95	64	51	80	80	80
6164980	83	71	59	79	81	79
6164981	91	69	60	78	79	79
6164982	100	69	61	78	79	79
6164983	90	60	48	79	78	78
6164984	87	66	60	67	67	72
6164985	96	64	56	80	77	77
Blank	85	51	41	76	69	71
MS	94	65	57	79	79	80
MSD	91	80	72	85	83	83
OPR	83	59	49	71	69	70
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6164970	72	71	71	64	68	75
6164971	75	75	74	68	67	82
6164973	75	74	74	67	69	82
6164974	71	71	70	63	64	77
6164975	65	63	63	52	59	70
6164976	67	68	67	56	67	74
6164977	79	81	79	69	74	88
6164978	77	77	74	63	75	85
6164979	79	80	77	68	77	87
6164980	77	78	76	71	78	88
6164981	78	79	79	76	77	88
6164982	79	79	82	76	71	85
6164983	75	76	75	63	73	84
6164984	71	72	72	70	65	76
6164985	76	77	79	70	74	86
Blank	69	70	68	61	60	73
MS	78	79	77	70	75	87
MSD	81	82	82	75	83	89
OPR	70	70	71	62	62	73
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

CHAIN OF CUSTODY RECORD

No. of coolers = 5

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

January 24, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/16/2010

Group Number: 1225757

SDG: DE040

PO Number: 1203-004-007-AL

Release Number: Tracking #11667

State of Sample Origin: CA

Client Sample DescriptionLancaster Labs (LLI) #

SL-132-SA5B-SS-0.0-0.5 Grab Soil	6166074
SL-133-SA5B-SS-0.0-0.5 Grab Soil	6166075
SL-131-SA5B-SS-0.0-0.5 Grab Soil	6166076
SL-135-SA5B-SS-0.0-0.5 Grab Soil	6166077
SL-134-SA5B-SS-0.0-0.5 Grab Soil	6166078
SED-021-SIV-SD-0.0-0.5 Grab Soil	6166079
SED-018-SIV-SD-0.0-0.5 Grab Soil	6166080
SED-016-SIV-SD-0.0-0.5 Grab Soil	6166082
SL-153-SA5B-SS-0.0-0.5 Grab Soil	6166083
SL-155-SA5B-SS-0.0-0.5 Grab Soil	6166084
SL-149-SA5B-SS-0.0-0.5 Grab Soil	6166085
SL-156-SA5B-SS-0.0-0.5 Grab Soil	6166086
SL-150-SA5B-SS-0.0-0.5 Grab Soil	6166087
SL-181-SA5B-SS-0.0-0.5 Grab Soil	6166088
SL-136-SA5B-SS-0.0-0.5 Grab Soil	6166089
SL-203-SA5B-SS-0.0-0.5 Grab Soil	6166090
SL-257-SA5B-SS-0.0-0.5 Grab Soil	6166091
SL-204-SA5B-SS-0.0-0.5 Grab Soil	6166092

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

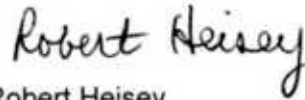
ELECTRONIC CDM Federal Services Program

Attn: Todd Burgess

COPY TO
1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey
Senior Specialist

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL132 SDG#: DE040-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	940	U 940	2,800	1
04688	Benzidine	92-87-5	6,600	U 6,600	19,000	1
04688	Benzoic acid	65-85-0	940	U 940	2,800	1
04688	Benzyl alcohol	100-51-6	940	U 940	2,800	1
04688	4-Bromophenyl-phenylether	101-55-3	94	U 94	940	1
04688	Butylbenzylphthalate	85-68-7	94	U 94	940	1
04688	Di-n-butylphthalate	84-74-2	94	U 94	940	1
04688	Carbazole	86-74-8	94	U 94	940	1
04688	4-Chloro-3-methylphenol	59-50-7	190	U 190	940	1
04688	4-Chloroaniline	106-47-8	380	U 380	940	1
04688	bis(2-Chloroethoxy)methane	111-91-1	94	U 94	940	1
04688	bis(2-Chloroethyl)ether	111-44-4	94	U 94	940	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	94	U 94	940	1
04688	2-Chloronaphthalene	91-58-7	94	U 94	940	1
04688	2-Chlorophenol	95-57-8	94	U 94	940	1
04688	4-Chlorophenyl-phenylether	7005-72-3	190	U 190	940	1
04688	Dibenzofuran	132-64-9	94	U 94	940	1
04688	1,2-Dichlorobenzene	95-50-1	94	U 94	940	1
04688	1,3-Dichlorobenzene	541-73-1	94	U 94	940	1
04688	1,4-Dichlorobenzene	106-46-7	94	U 94	940	1
04688	3,3'-Dichlorobenzidine	91-94-1	560	U 560	1,900	1
04688	2,4-Dichlorophenol	120-83-2	94	U 94	940	1
04688	Diethylphthalate	84-66-2	94	U 94	940	1
04688	2,4-Dimethylphenol	105-67-9	190	U 190	940	1
04688	3,5-Dimethylphenol	108-68-9	190	U 190	940	1
04688	Dimethylphthalate	131-11-3	94	U 94	940	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	940	U 940	2,800	1
04688	2,4-Dinitrophenol	51-28-5	3,800	U 3,800	11,000	1
04688	2,4-Dinitrotoluene	121-14-2	190	U 190	940	1
04688	2,6-Dinitrotoluene	606-20-2	94	U 94	940	1
04688	1,2-Diphenylhydrazine	122-66-7	94	U 94	940	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	94	U 94	1,900	1
04688	Hexachlorobenzene	118-74-1	94	U 94	940	1
04688	Hexachlorobutadiene	87-68-3	380	U 380	940	1
04688	Hexachlorocyclopentadiene	77-47-4	940	U 940	2,800	1
04688	Hexachloroethane	67-72-1	94	U 94	940	1
04688	Isophorone	78-59-1	94	U 94	940	1
04688	2-Methylphenol	95-48-7	190	U 190	940	1
04688	4-Methylphenol	106-44-5	190	U 190	940	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	94	U 94	940	1
04688	3-Nitroaniline	99-09-2	190	U 190	940	1
04688	4-Nitroaniline	100-01-6	380	U 380	940	1
04688	Nitrobenzene	98-95-3	94	U 94	940	1
04688	2-Nitrophenol	88-75-5	94	U 94	940	1
04688	4-Nitrophenol	100-02-7	940	U 940	2,800	1
04688	N-Nitroso-di-n-propylamine	621-64-7	94	U 94	940	1
04688	N-Nitrosodiphenylamine	86-30-6	94	U 94	940	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL132 SDG#: DE040-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	94	U 94	940	1
04688	Pentachlorophenol	87-86-5	940	U 940	2,800	1
04688	Phenol	108-95-2	94	U 94	940	1
04688	1,2,4-Trichlorobenzene	120-82-1	94	U 94	940	1
04688	2,4,5-Trichlorophenol	95-95-4	190	U 190	940	1
04688	2,4,6-Trichlorophenol	88-06-2	190	U 190	940	1

Reporting limits were raised due to interference from the sample matrix.

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	19	U 19	47	5
10138	Acenaphthylene	208-96-8	9.4	U 9.4	47	5
10138	Anthracene	120-12-7	9.4	U 9.4	47	5
10138	Benzo(a)anthracene	56-55-3	19	U 19	47	5
10138	Benzo(a)pyrene	50-32-8	19	U 19	47	5
10138	Benzo(b)fluoranthene	205-99-2	22	J 19	47	5
10138	Benzo(g,h,i)perylene	191-24-2	24	J 19	47	5
10138	Benzo(k)fluoranthene	207-08-9	19	U 19	47	5
10138	Chrysene	218-01-9	29	J 9.4	47	5
10138	Dibenz(a,h)anthracene	53-70-3	19	U 19	47	5
10138	Fluoranthene	206-44-0	22	J 19	47	5
10138	Fluorene	86-73-7	19	U 19	47	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	19	U 19	47	5
10138	1-Methylnaphthalene	90-12-0	69	U 19	47	5
10138	2-Methylnaphthalene	91-57-6	72	U 19	47	5
10138	Naphthalene	91-20-3	160	U 19	47	5
10138	N-Nitrosodimethylamine	62-75-9	19	U 19	47	5
10138	Phenanthrene	85-01-8	120	U 19	47	5
10138	Pyrene	129-00-0	25	J 19	47	5

Reporting limits were raised due to interference from the sample matrix.

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U	5.0	10	1
10401	2,4-DB	94-82-6	7.2		0.70	1.9	1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.4	1
10401	Dinoseb	88-85-7	0.90	U	0.90	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U	0.90	1.9	1
10401	MCPA	94-74-6	180	J	86	280	1
10401	MCPP (Mecoprop)	93-65-2	210	U	210	280	1
10401	2,4,5-T	93-76-5	0.28		0.092	0.19	1
10401	2,4,5-TP	93-72-1	0.084	U	0.084	0.19	

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL132 SDG#: DE040-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compound was affected: MCPP.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.34 U	0.34	0.86	1
01363	Alpha BHC	319-84-6	0.18 U	0.18	0.86	1
01363	Beta BHC	319-85-7	1.0	0.31	0.86	1
01363	Gamma BHC - Lindane	58-89-9	0.31 U	0.31	0.86	1
01363	Chlordane	57-74-9	570	21	88	5
01363	p,p-DDD	72-54-8	1.7 U	1.7	8.8	5
01363	p,p-DDE	72-55-9	1.7 U	1.7	8.8	5
01363	p,p-DDT	50-29-3	9.2 U	9.2	9.2	5
01363	Delta BHC	319-86-8	0.26 U	0.26	0.86	1
01363	Dieldrin	60-57-1	1.7 U	1.7	8.8	5
01363	Endosulfan I	959-98-8	1.1 U	1.1	4.3	5
01363	Endosulfan II	33213-65-9	1.7 U	1.7	8.8	5
01363	Endosulfan Sulfate	1031-07-8	1.7 U	1.7	8.8	5
01363	Endrin	72-20-8	1.7 U	1.7	8.8	5
01363	Endrin Aldehyde	7421-93-4	13 U	13	13	5
01363	Endrin Ketone	53494-70-5	6.1 U	6.1	8.8	5
01363	Heptachlor	76-44-8	0.36 J	0.31	0.86	1
01363	Heptachlor Epoxide	1024-57-3	0.88 U	0.88	4.3	5
01363	Methoxychlor	72-43-5	8.8 U	8.8	43	5
01363	Mirex	2385-85-5	1.7 U	1.7	8.8	5
01363	Toxaphene	8001-35-2	57 U	57	170	5

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	23 U	23	74	20
10225	Aroclor 5442	12642-23-8	23 U	23	74	20
10225	Aroclor 5460	11126-42-4	23 U	23	74	20
10225	PCB-1016	12674-11-2	7.4 U	7.4	38	20
10225	PCB-1221	11104-28-2	11 U	11	38	20
10225	PCB-1232	11141-16-5	12 U	12	38	20
10225	PCB-1242	53469-21-9	11 U	11	38	20
10225	PCB-1248	12672-29-6	7.4 U	7.4	38	20
10225	PCB-1254	11097-69-1	49	7.4	38	20
10225	PCB-1260	11096-82-5	7.4 U	7.4	38	20
10225	PCB-1262	37324-23-5	7.4 U	7.4	38	20
10225	PCB-1268	11100-14-4	7.4 U	7.4	38	20

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL132 SDG#: DE040-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,000	5.50	21.9	1
07914	Boron	7440-42-8	6.95	0.973	5.47	1
01650	Calcium	7440-70-2	3,050	6.70	21.9	1
01654	Iron	7439-89-6	20,200	5.15	21.9	1
01656	Lithium	7439-93-2	15.5	0.24	2.2	1
01657	Magnesium	7439-95-4	3,690	2.78	10.9	1
06958	Manganese	7439-96-5	219	0.0853	0.547	1
10145	Phosphorus	7723-14-0	399	0.612	10.9	1
01662	Potassium	7440-09-7	2,520	19.7	54.7	1
01667	Sodium	7440-23-5	129	40.8	109	1
07968	Strontium	7440-24-6	26.7	0.0678	0.547	1
06969	Tin	7440-31-5	2.60 J	1.09	10.9	1
06970	Titanium	7440-32-6	1,200	0.415	1.09	1
10146	Zirconium	7440-67-7	2.36 J	0.918	5.47	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0662 U	0.0662	0.221	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	3.84	0.0662	0.442	2
06126	Barium	7440-39-3	84.9	0.119	0.442	2
06127	Beryllium	7440-41-7	0.489	0.0177	0.110	2
06128	Cadmium	7440-43-9	0.138	0.0397	0.110	2
06131	Chromium	7440-47-3	22.6	0.132	0.442	2
06132	Cobalt	7440-48-4	5.22	0.0221	0.110	2
06133	Copper	7440-50-8	8.60	0.0729	0.442	2
06135	Lead	7439-92-1	19.8	0.0115	0.221	2
06138	Molybdenum	7439-98-7	0.505	0.0552	0.110	2
06139	Nickel	7440-02-0	14.3	0.110	0.442	2
06141	Selenium	7782-49-2	0.130 J	0.0442	0.442	2
06142	Silver	7440-22-4	0.109 J	0.0132	0.110	2
06145	Thallium	7440-28-0	0.197	0.0331	0.110	2
06148	Vanadium	7440-62-2	37.2	0.0243	0.110	2
06149	Zinc	7440-66-6	76.6	0.618	3.31	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.108	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.90 U	0.90	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.73 J	0.23	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL132 SDG#: DE040-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	403	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.86	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/15/2011 17:09	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 08:11	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 11:36	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 01:51	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 02:05	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 15:13	Lindsey K Lafferty	20
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

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Collected: 12/15/2010 11:05

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14420 Albemarle Point Place
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Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL132 SDG#: DE040-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:00	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:00	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:00	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 05:49	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/11/2011 22:11	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 02:01	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 15:20	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL133 SDG#: DE040-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	1,800	U 1,800	5,400	1
04688	Benzidine	92-87-5	13,000	U 13,000	36,000	1
04688	Benzoic acid	65-85-0	1,800	U 1,800	5,400	1
04688	Benzyl alcohol	100-51-6	1,800	U 1,800	5,400	1
04688	4-Bromophenyl-phenylether	101-55-3	180	U 180	1,800	1
04688	Butylbenzylphthalate	85-68-7	180	U 180	1,800	1
04688	Di-n-butylphthalate	84-74-2	180	U 180	1,800	1
04688	Carbazole	86-74-8	180	U 180	1,800	1
04688	4-Chloro-3-methylphenol	59-50-7	360	U 360	1,800	1
04688	4-Chloroaniline	106-47-8	720	U 720	1,800	1
04688	bis(2-Chloroethoxy)methane	111-91-1	180	U 180	1,800	1
04688	bis(2-Chloroethyl)ether	111-44-4	180	U 180	1,800	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	180	U 180	1,800	1
04688	2-Chloronaphthalene	91-58-7	180	U 180	1,800	1
04688	2-Chlorophenol	95-57-8	180	U 180	1,800	1
04688	4-Chlorophenyl-phenylether	7005-72-3	360	U 360	1,800	1
04688	Dibenzofuran	132-64-9	180	U 180	1,800	1
04688	1,2-Dichlorobenzene	95-50-1	180	U 180	1,800	1
04688	1,3-Dichlorobenzene	541-73-1	180	U 180	1,800	1
04688	1,4-Dichlorobenzene	106-46-7	180	U 180	1,800	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,100	U 1,100	3,600	1
04688	2,4-Dichlorophenol	120-83-2	180	U 180	1,800	1
04688	Diethylphthalate	84-66-2	180	U 180	1,800	1
04688	2,4-Dimethylphenol	105-67-9	360	U 360	1,800	1
04688	3,5-Dimethylphenol	108-68-9	360	U 360	1,800	1
04688	Dimethylphthalate	131-11-3	180	U 180	1,800	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,800	U 1,800	5,400	1
04688	2,4-Dinitrophenol	51-28-5	7,200	U 7,200	21,000	1
04688	2,4-Dinitrotoluene	121-14-2	360	U 360	1,800	1
04688	2,6-Dinitrotoluene	606-20-2	180	U 180	1,800	1
04688	1,2-Diphenylhydrazine	122-66-7	180	U 180	1,800	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	180	U 180	3,600	1
04688	Hexachlorobenzene	118-74-1	180	U 180	1,800	1
04688	Hexachlorobutadiene	87-68-3	720	U 720	1,800	1
04688	Hexachlorocyclopentadiene	77-47-4	1,800	U 1,800	5,400	1
04688	Hexachloroethane	67-72-1	180	U 180	1,800	1
04688	Isophorone	78-59-1	180	U 180	1,800	1
04688	2-Methylphenol	95-48-7	360	U 360	1,800	1
04688	4-Methylphenol	106-44-5	360	U 360	1,800	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	180	U 180	1,800	1
04688	3-Nitroaniline	99-09-2	360	U 360	1,800	1
04688	4-Nitroaniline	100-01-6	720	U 720	1,800	1
04688	Nitrobenzene	98-95-3	180	U 180	1,800	1
04688	2-Nitrophenol	88-75-5	180	U 180	1,800	1
04688	4-Nitrophenol	100-02-7	1,800	U 1,800	5,400	1
04688	N-Nitroso-di-n-propylamine	621-64-7	180	U 180	1,800	1
04688	N-Nitrosodiphenylamine	86-30-6	180	U 180	1,800	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL133 SDG#: DE040-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	180	U 180	1,800	1
04688	Pentachlorophenol	87-86-5	1,800	U 1,800	5,400	1
04688	Phenol	108-95-2	180	U 180	1,800	1
04688	1,2,4-Trichlorobenzene	120-82-1	180	U 180	1,800	1
04688	2,4,5-Trichlorophenol	95-95-4	360	U 360	1,800	1
04688	2,4,6-Trichlorophenol	88-06-2	360	U 360	1,800	1

Reporting limits were raised due to interference from the sample matrix.

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	36	U 36	89	5
10138	Acenaphthylene	208-96-8	18	U 18	89	5
10138	Anthracene	120-12-7	18	U 18	89	5
10138	Benzo(a)anthracene	56-55-3	36	U 36	89	5
10138	Benzo(a)pyrene	50-32-8	44	J 36	89	5
10138	Benzo(b)fluoranthene	205-99-2	170	36	89	5
10138	Benzo(g,h,i)perylene	191-24-2	120	36	89	5
10138	Benzo(k)fluoranthene	207-08-9	36	U 36	89	5
10138	Chrysene	218-01-9	140	18	89	5
10138	Dibenz(a,h)anthracene	53-70-3	52	J 36	89	5
10138	Fluoranthene	206-44-0	36	U 36	89	5
10138	Fluorene	86-73-7	36	U 36	89	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	39	J 36	89	5
10138	1-Methylnaphthalene	90-12-0	36	U 36	89	5
10138	2-Methylnaphthalene	91-57-6	36	U 36	89	5
10138	Naphthalene	91-20-3	230	36	89	5
10138	N-Nitrosodimethylamine	62-75-9	36	U 36	89	5
10138	Phenanthrene	85-01-8	36	U 36	89	5
10138	Pyrene	129-00-0	36	U 36	89	5

Reporting limits were raised due to interference from the sample matrix.

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.7	1
10401	2,4-DB	94-82-6	2.2		0.67	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.86	U	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86	U	0.86	1.8	1
10401	MCPA	94-74-6	82	U	82	270	1
10401	MCPP (Mecoprop)	93-65-2	80	U	80	270	1
10401	2,4,5-T	93-76-5	0.088	U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg	

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL133 SDG#: DE040-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	1.4 U	1.4	3.6	20
01363	Alpha BHC	319-84-6	0.73 U	0.73	3.6	20
01363	Beta BHC	319-85-7	1.3 U	1.3	3.6	20
01363	Gamma BHC - Lindane	58-89-9	0.73 U	0.73	3.6	20
01363	Chlordane	57-74-9	660	86	360	100
01363	p,p-DDD	72-54-8	44 U	44	44	100
01363	p,p-DDE	72-55-9	350	35	180	500
01363	p,p-DDT	50-29-3	340	35	180	500
01363	Delta BHC	319-86-8	0.77 U	0.77	3.6	20
01363	Dieldrin	60-57-1	12 U	12	12	20
01363	Endosulfan I	959-98-8	0.94 U	0.94	3.6	20
01363	Endosulfan II	33213-65-9	1.4 U	1.4	7.3	20
01363	Endosulfan Sulfate	1031-07-8	4.1 U	4.1	7.3	20
01363	Endrin	72-20-8	1.4 U	1.4	7.3	20
01363	Endrin Aldehyde	7421-93-4	1.4 U	1.4	7.3	20
01363	Endrin Ketone	53494-70-5	1.4 U	1.4	7.3	20
01363	Heptachlor	76-44-8	2.9 U	2.9	3.6	20
01363	Heptachlor Epoxide	1024-57-3	0.73 U	0.73	3.6	20
01363	Methoxychlor	72-43-5	7.3 U	7.3	36	20
01363	Mirex	2385-85-5	1.4 U	1.4	7.3	20
01363	Toxaphene	8001-35-2	47 U	47	140	20

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of technical chlordane, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: endosulfan sulfate.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	5.4 U	5.4	18	5
10225	Aroclor 5442	12642-23-8	5.4 U	5.4	18	5
10225	Aroclor 5460	11126-42-4	5.4 U	5.4	18	5
10225	PCB-1016	12674-11-2	1.8 U	1.8	9.1	5
10225	PCB-1221	11104-28-2	2.7 U	2.7	9.1	5
10225	PCB-1232	11141-16-5	2.8 U	2.8	9.1	5
10225	PCB-1242	53469-21-9	2.7 U	2.7	9.1	5
10225	PCB-1248	12672-29-6	1.8 U	1.8	9.1	5
10225	PCB-1254	11097-69-1	1.8 U	1.8	9.1	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

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14420 Albemarle Point Place
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Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL133 SDG#: DE040-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	PCB-1260	11096-82-5	1.8 U	1.8	9.1	5
10225	PCB-1262	37324-23-5	1.8 U	1.8	9.1	5
10225	PCB-1268	11100-14-4	1.8 U	1.8	9.1	5
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.						
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	14,000	5.34	21.2	1
07914	Boron	7440-42-8	5.69	0.945	5.31	1
01650	Calcium	7440-70-2	3,070	6.51	21.2	1
01654	Iron	7439-89-6	18,700	5.00	21.2	1
01656	Lithium	7439-93-2	15.8	0.23	2.1	1
01657	Magnesium	7439-95-4	3,560	2.70	10.6	1
06958	Manganese	7439-96-5	211	0.0829	0.531	1
10145	Phosphorus	7723-14-0	412	0.595	10.6	1
01662	Potassium	7440-09-7	2,550	19.1	53.1	1
01667	Sodium	7440-23-5	121	39.6	106	1
07968	Strontium	7440-24-6	20.4	0.0659	0.531	1
06969	Tin	7440-31-5	2.24 J	1.06	10.6	1
06970	Titanium	7440-32-6	1,090	0.404	1.06	1
10146	Zirconium	7440-67-7	1.92 J	0.892	5.31	1
SW-846 6020 mg/kg mg/kg mg/kg						
06124	Antimony	7440-36-0	0.141 J	0.0631	0.210	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	2.81	0.0631	0.421	2
06126	Barium	7440-39-3	58.2	0.114	0.421	2
06127	Beryllium	7440-41-7	0.350	0.0168	0.105	2
06128	Cadmium	7440-43-9	0.140	0.0379	0.105	2
06131	Chromium	7440-47-3	14.1	0.126	0.421	2
06132	Cobalt	7440-48-4	3.76	0.0210	0.105	2
06133	Copper	7440-50-8	6.61	0.0694	0.421	2
06135	Lead	7439-92-1	9.98	0.0109	0.210	2
06138	Molybdenum	7439-98-7	0.419	0.0526	0.105	2
06139	Nickel	7440-02-0	11.6	0.105	0.421	2
06141	Selenium	7782-49-2	0.125 J	0.0421	0.421	2
06142	Silver	7440-22-4	0.0610 J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.147	0.0316	0.105	2
06148	Vanadium	7440-62-2	30.1	0.0231	0.105	2
06149	Zinc	7440-66-6	91.5	0.589	3.16	2
SW-846 7471A mg/kg mg/kg mg/kg						
00159	Mercury	7439-97-6	0.0029 U	0.0029	0.102	1
Wet Chemistry EPA 300.0 mg/kg mg/kg mg/kg						
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.0 J	0.86	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
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Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL133 SDG#: DE040-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		EPA 314.0	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.2	1
		SW-846 7199	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.1	0.21	1.1	1
		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	430	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.25	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.8	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 14:26	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 09:49	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 12:58	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 02:19	Jamie L Brillhart	20
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/16/2011 21:15	Jamie L Brillhart	100
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/20/2011 22:28	Jamie L Brillhart	500
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 06:38	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
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Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

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14420 Albemarle Point Place
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Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL133 SDG#: DE040-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 12:42	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 12:42	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 12:42	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 05:55	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/11/2011 23:22	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 03:13	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 15:28	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL133 SDG#: DE040-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL131 SDG#: DE040-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	70	U 70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	35	J 18	350	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	70	U 70	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL131 SDG#: DE040-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70 U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.70 U	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.70 U	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.95 J	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.70 U	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.70 U	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3 U	6.3	19	1
10138	Chrysene	218-01-9	0.84 J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70 U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	0.70 U	0.70	1.8	1
10138	Fluorene	86-73-7	0.70 U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70 U	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.70 U	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.70 U	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70 U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	0.70 U	0.70	1.8	1
10138	Pyrene	129-00-0	0.70 U	0.70	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.5 U	1.5	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.5	1
10401	2,4-DB	94-82-6	8.6 U	8.6	8.6	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84 U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84 U	0.84	1.8	1
10401	MCPA	94-74-6	500	80	260	1
10401	MCPP (Mecoprop)	93-65-2	190 U	190	260	1
10401	2,4,5-T	93-76-5	0.086 U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079 U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL131 SDG#: DE040-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.17	1
01363	Chlordane	57-74-9	0.84 U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.16 U	0.16	0.36	1
01363	p,p-DDE	72-55-9	0.14 U	0.14	0.36	1
01363	p,p-DDT	50-29-3	0.54 U	0.54	0.54	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.17	1
01363	Dieldrin	60-57-1	3.9	0.35	1.8	5
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069 U	0.069	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.36	1
01363	Endrin	72-20-8	0.069 U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.15 U	0.15	0.36	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.036 U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.7	1
01363	Mirex	2385-85-5	0.44 U	0.44	0.44	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.3 J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	3.5	0.35	1.8	1
10225	PCB-1260	11096-82-5	2.7	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL131 SDG#: DE040-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,400	5.03	20.0	1
07914	Boron	7440-42-8	6.67	0.890	5.00	1
01650	Calcium	7440-70-2	3,180	6.13	20.0	1
01654	Iron	7439-89-6	22,500	4.71	20.0	1
01656	Lithium	7439-93-2	20.8	0.22	2.0	1
01657	Magnesium	7439-95-4	4,620	2.54	10.0	1
06958	Manganese	7439-96-5	331	0.0780	0.500	1
10145	Phosphorus	7723-14-0	422	0.560	10.0	1
01662	Potassium	7440-09-7	3,720	18.0	50.0	1
01667	Sodium	7440-23-5	125	37.3	100	1
07968	Strontium	7440-24-6	20.3	0.0620	0.500	1
06969	Tin	7440-31-5	2.49 J	1.00	10.0	1
06970	Titanium	7440-32-6	1,430	0.380	1.00	1
10146	Zirconium	7440-67-7	3.08 J	0.840	5.00	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0800 J	0.0630	0.210	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.13	0.0630	0.420	2
06126	Barium	7440-39-3	113	0.113	0.420	2
06127	Beryllium	7440-41-7	0.552	0.0168	0.105	2
06128	Cadmium	7440-43-9	0.316	0.0378	0.105	2
06131	Chromium	7440-47-3	26.1	0.126	0.420	2
06132	Cobalt	7440-48-4	6.36	0.0210	0.105	2
06133	Copper	7440-50-8	10.4	0.0693	0.420	2
06135	Lead	7439-92-1	18.9	0.0109	0.210	2
06138	Molybdenum	7439-98-7	0.536	0.0525	0.105	2
06139	Nickel	7440-02-0	16.6	0.105	0.420	2
06141	Selenium	7782-49-2	0.128 J	0.0420	0.420	2
06142	Silver	7440-22-4	0.0671 J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.265	0.0315	0.105	2
06148	Vanadium	7440-62-2	41.0	0.0231	0.105	2
06149	Zinc	7440-66-6	103	0.588	3.15	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0421 J	0.0028	0.0984	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.9	0.84	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.5	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.1	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL131 SDG#: DE040-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	449	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.05	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	4.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 15:00	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 10:22	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 13:25	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 03:01	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/20/2011 22:14	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 06:57	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 16:27	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL131 SDG#: DE040-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:03	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/31/2010 07:12	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:03	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:03	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 05:56	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/11/2011 23:36	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 03:37	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 15:52	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL135 SDG#: DE040-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560	1
04688	Anthracene	120-12-7	21	J 19	190	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700	1
04688	Benzo(a)anthracene	56-55-3	85	J 19	190	1
04688	Benzo(a)pyrene	50-32-8	73	J 19	190	1
04688	Benzo(b)fluoranthene	205-99-2	92	J 19	190	1
04688	Benzo(g,h,i)perylene	191-24-2	46	J 19	190	1
04688	Benzo(k)fluoranthene	207-08-9	44	J 19	190	1
04688	Benzoic acid	65-85-0	490	J 190	560	1
04688	Benzyl alcohol	100-51-6	190	U 190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190	1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190	1
04688	4-Chloroaniline	106-47-8	74	U 74	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190	1
04688	Chrysene	218-01-9	110	J 19	190	1
04688	Dibenzofuran	132-64-9	50	J 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	Diethylphthalate	84-66-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190	1
04688	Dimethylphthalate	131-11-3	19	U 19	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560	1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	300	J 19	370	1
04688	Fluoranthene	206-44-0	150	J 19	190	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	74	U 74	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	36	J 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	1-Methylnaphthalene	90-12-0	71	J 19	190	1
04688	2-Methylnaphthalene	91-57-6	67	J 19	190	1
04688	2-Methylphenol	95-48-7	37	U 37	190	1
04688	4-Methylphenol	106-44-5	37	U 37	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL135 SDG#: DE040-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	37	U 37	190	1
04688	4-Nitroaniline	100-01-6	74	U 74	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	19	U 19	190	1
04688	Pentachlorophenol	87-86-5	190	U 190	560	1
04688	Phenanthrene	85-01-8	200	U 19	190	1
04688	Phenol	108-95-2	20	J 19	190	1
04688	Pyrene	129-00-0	170	J 19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190	1
GC/MS	Semivolatiles SW-846 8270C SIM		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.3	5
10138	Acenaphthylene	208-96-8	1.9	J 1.9	9.3	5
10138	Dibenz(a,h)anthracene	53-70-3	4.6	J 3.7	9.3	5
10138	Fluorene	86-73-7	3.7	U 3.7	9.3	5
10138	Naphthalene	91-20-3	49	U 3.7	9.3	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.3	5
	Reporting limits were raised due to interference from the sample matrix.					
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	2.3	U 2.3	4.0	1
10401	Dalapon	75-99-0	4.9	U 4.9	10	1
10401	2,4-DB	94-82-6	27	U 27	27	1
10401	Dicamba	1918-00-9	0.60	J 0.44	1.3	1
10401	Dinoseb	88-85-7	0.89	U 0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U 0.89	1.9	1
10401	MCPA	94-74-6	84	U 84	280	1
10401	MCPP (Mecoprop)	93-65-2	83	U 83	280	1
10401	2,4,5-T	93-76-5	0.30	U 0.30	0.30	1
10401	2,4,5-TP	93-72-1	0.083	U 0.083	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL135 SDG#: DE040-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Despite numerous cleanup methods, our usual reporting limits were not attained.						
Perchlorate		SW-846 6850 1/2007	ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3 U	2.3	5.6	1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.73 U	0.73	1.8	10
01363	Alpha BHC	319-84-6	0.38 U	0.38	1.8	10
01363	Beta BHC	319-85-7	0.67 U	0.67	1.8	10
01363	Gamma BHC - Lindane	58-89-9	0.87 J	0.38	1.8	10
01363	Chlordane	57-74-9	8.9 U	8.9	38	10
01363	p,p-DDD	72-54-8	6.2	0.73	3.8	10
01363	p,p-DDE	72-55-9	26	0.73	3.8	10
01363	p,p-DDT	50-29-3	14	0.73	3.8	10
01363	Delta BHC	319-86-8	0.40 U	0.40	1.8	10
01363	Dieldrin	60-57-1	0.73 U	0.73	3.8	10
01363	Endosulfan I	959-98-8	0.49 U	0.49	1.8	10
01363	Endosulfan II	33213-65-9	0.73 U	0.73	3.8	10
01363	Endosulfan Sulfate	1031-07-8	0.73 U	0.73	3.8	10
01363	Endrin	72-20-8	0.73 U	0.73	3.8	10
01363	Endrin Aldehyde	7421-93-4	5.2 U	5.2	5.2	10
01363	Endrin Ketone	53494-70-5	0.73 U	0.73	3.8	10
01363	Heptachlor	76-44-8	0.67 U	0.67	1.8	10
01363	Heptachlor Epoxide	1024-57-3	1.0 U	1.0	1.8	10
01363	Methoxychlor	72-43-5	3.8 U	3.8	18	10
01363	Mirex	2385-85-5	0.73 U	0.73	3.8	10
01363	Toxaphene	8001-35-2	24 U	24	73	10

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	11 U	11	37	10
10225	Aroclor 5442	12642-23-8	11 U	11	37	10
10225	Aroclor 5460	11126-42-4	17 J	11	37	10
10225	PCB-1016	12674-11-2	3.7 U	3.7	19	10
10225	PCB-1221	11104-28-2	5.6 U	5.6	19	10
10225	PCB-1232	11141-16-5	5.8 U	5.8	19	10
10225	PCB-1242	53469-21-9	5.6 U	5.6	19	10
10225	PCB-1248	12672-29-6	3.7 U	3.7	19	10
10225	PCB-1254	11097-69-1	20	3.7	19	10
10225	PCB-1260	11096-82-5	9.7 J	3.7	19	10
10225	PCB-1262	37324-23-5	3.7 U	3.7	19	10
10225	PCB-1268	11100-14-4	3.7 U	3.7	19	10

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL135 SDG#: DE040-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,000	5.43	21.6	1
07914	Boron	7440-42-8	5.53	0.960	5.39	1
01650	Calcium	7440-70-2	2,960	6.61	21.6	1
01654	Iron	7439-89-6	20,800	5.08	21.6	1
01656	Lithium	7439-93-2	21.3	0.24	2.2	1
01657	Magnesium	7439-95-4	4,500	2.74	10.8	1
06958	Manganese	7439-96-5	250	0.0841	0.539	1
10145	Phosphorus	7723-14-0	414	0.604	10.8	1
01662	Potassium	7440-09-7	3,280	19.4	53.9	1
01667	Sodium	7440-23-5	110	40.2	108	1
07968	Strontium	7440-24-6	13.8	0.0669	0.539	1
06969	Tin	7440-31-5	2.56 J	1.08	10.8	1
06970	Titanium	7440-32-6	1,320	0.410	1.08	1
10146	Zirconium	7440-67-7	1.84 J	0.906	5.39	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.207 J	0.0660	0.220	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.00	0.0660	0.440	2
06126	Barium	7440-39-3	66.1	0.119	0.440	2
06127	Beryllium	7440-41-7	0.455	0.0176	0.110	2
06128	Cadmium	7440-43-9	0.296	0.0396	0.110	2
06131	Chromium	7440-47-3	16.9	0.132	0.440	2
06132	Cobalt	7440-48-4	4.26	0.0220	0.110	2
06133	Copper	7440-50-8	8.59	0.0726	0.440	2
06135	Lead	7439-92-1	80.9	0.0114	0.220	2
06138	Molybdenum	7439-98-7	0.507	0.0550	0.110	2
06139	Nickel	7440-02-0	11.7	0.110	0.440	2
06141	Selenium	7782-49-2	0.0906 J	0.0440	0.440	2
06142	Silver	7440-22-4	0.147	0.0132	0.110	2
06145	Thallium	7440-28-0	0.208	0.0330	0.110	2
06148	Vanadium	7440-62-2	29.7	0.0242	0.110	2
06149	Zinc	7440-66-6	105	0.616	3.30	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.186	0.0029	0.103	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7	0.89	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.3	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	2.0	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL135 SDG#: DE040-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	452	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.33	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	10	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 15:35	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 10:54	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 13:52	Sarah M Snyder	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103500020A	12/21/2010 18:22	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 03:29	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 07:15	Lindsey K Lafferty	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 16:45	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103500020A	12/17/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL135 SDG#: DE040-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/31/2010 07:14	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 05:57	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/11/2011 23:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 04:01	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 16:08	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL134 SDG#: DE040-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	70	U 70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	J 18	350	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	70	U 70	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL134 SDG#: DE040-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70 U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.81 J	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.80 J	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	1.7 J	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.97 J	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.70 U	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3 U	6.3	19	1
10138	Chrysene	218-01-9	1.7 J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70 U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	1.2 J	0.70	1.8	1
10138	Fluorene	86-73-7	0.70 U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70 U	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	1.0 J	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.1 J	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70 U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	3.4 U	0.70	1.8	1
10138	Pyrene	129-00-0	1.2 J	0.70	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.5	1
10401	2,4-DB	94-82-6	0.65 U	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84 U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84 U	0.84	1.8	1
10401	MCPA	94-74-6	170 J	80	260	1
10401	MCPP (Mecoprop)	93-65-2	200 J	79	260	1
10401	2,4,5-T	93-76-5	0.086 U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079 U	0.079	0.18	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.073 J	0.036	0.17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL134 SDG#: DE040-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Beta BHC	319-85-7	0.22 U	0.22	0.22	1
01363	Gamma BHC - Lindane	58-89-9	0.075 U	0.075	0.17	1
01363	Chlordane	57-74-9	0.84 U	0.84	3.6	1
01363	p,p-DDD	72-54-8	2.0 U	2.0	2.0	1
01363	p,p-DDE	72-55-9	1.3 U	1.3	1.3	1
01363	p,p-DDT	50-29-3	4.2 U	0.35	1.8	5
01363	Delta BHC	319-86-8	0.054 J	0.038	0.17	1
01363	Dieldrin	60-57-1	0.35 U	0.35	0.36	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.18 U	0.18	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.40 U	0.40	0.40	1
01363	Endrin	72-20-8	0.069 U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.62 U	0.62	0.62	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.15 U	0.15	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.14 U	0.14	0.17	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.7	1
01363	Mirex	2385-85-5	0.069 U	0.069	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.1 U	2.1	6.9	2
10225	Aroclor 5442	12642-23-8	2.1 U	2.1	6.9	2
10225	Aroclor 5460	11126-42-4	7.1	2.1	6.9	2
10225	PCB-1016	12674-11-2	0.69 U	0.69	3.6	2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.6	2
10225	PCB-1232	11141-16-5	1.1 U	1.1	3.6	2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.6	2
10225	PCB-1248	12672-29-6	0.69 U	0.69	3.6	2
10225	PCB-1254	11097-69-1	17	0.69	3.6	2
10225	PCB-1260	11096-82-5	9.4	0.69	3.6	2
10225	PCB-1262	37324-23-5	0.69 U	0.69	3.6	2
10225	PCB-1268	11100-14-4	0.69 U	0.69	3.6	2

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL134 SDG#: DE040-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,500	5.19	20.6	1
07914	Boron	7440-42-8	4.96 J	0.918	5.15	1
01650	Calcium	7440-70-2	2,490	6.32	20.6	1
01654	Iron	7439-89-6	19,300	4.86	20.6	1
01656	Lithium	7439-93-2	19.8	0.23	2.1	1
01657	Magnesium	7439-95-4	3,630	2.62	10.3	1
06958	Manganese	7439-96-5	213	0.0804	0.515	1
10145	Phosphorus	7723-14-0	330	0.577	10.3	1
01662	Potassium	7440-09-7	2,550	18.6	51.5	1
01667	Sodium	7440-23-5	103	38.5	103	1
07968	Strontium	7440-24-6	15.6	0.0639	0.515	1
06969	Tin	7440-31-5	2.32 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,130	0.392	1.03	1
10146	Zirconium	7440-67-7	1.38 J	0.866	5.15	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.118 J	0.0613	0.204	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.77	0.0613	0.408	2
06126	Barium	7440-39-3	72.6	0.110	0.408	2
06127	Beryllium	7440-41-7	0.556	0.0163	0.102	2
06128	Cadmium	7440-43-9	0.180	0.0368	0.102	2
06131	Chromium	7440-47-3	28.1	0.123	0.408	2
06132	Cobalt	7440-48-4	5.29	0.0204	0.102	2
06133	Copper	7440-50-8	8.60	0.0674	0.408	2
06135	Lead	7439-92-1	13.8	0.0106	0.204	2
06138	Molybdenum	7439-98-7	0.575	0.0510	0.102	2
06139	Nickel	7440-02-0	17.6	0.102	0.408	2
06141	Selenium	7782-49-2	0.101 J	0.0408	0.408	2
06142	Silver	7440-22-4	0.123	0.0123	0.102	2
06145	Thallium	7440-28-0	0.202	0.0306	0.102	2
06148	Vanadium	7440-62-2	37.0	0.0225	0.102	2
06149	Zinc	7440-66-6	66.3	0.572	3.06	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0181 J	0.0029	0.0999	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1	0.84	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.5	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.50 J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL134 SDG#: DE040-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	452	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
			SW-846 9045C modified	Std. Units	Std. Units	Std. Units
00394	22a pH by 9045C	n.a.	6.74	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	4.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 16:10	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 11:27	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 14:20	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 03:43	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/16/2011 21:29	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 07:34	Lindsey K Lafferty	2
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 17:04	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL134 SDG#: DE040-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:01	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 00:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 04:25	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 16:16	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD021 SDG#: DE040-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	70	U 70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	J 18	350	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	70	U 70	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD021 SDG#: DE040-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70 U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.70 U	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.70 U	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.70 U	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.70 U	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.70 U	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3 U	6.3	19	1
10138	Chrysene	218-01-9	0.62 J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70 U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	0.70 U	0.70	1.8	1
10138	Fluorene	86-73-7	0.70 U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70 U	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.70 U	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.70 U	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70 U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	0.70 U	0.70	1.8	1
10138	Pyrene	129-00-0	0.70 U	0.70	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.5	1
10401	2,4-DB	94-82-6	4.7 U	4.7	4.7	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84 U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84 U	0.84	1.8	1
10401	MCPA	94-74-6	280 U	280	280	1
10401	MCPP (Mecoprop)	93-65-2	370 U	79	260	1
10401	2,4,5-T	93-76-5	0.18 U	0.18	0.18	1
10401	2,4,5-TP	93-72-1	0.079 U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD021 SDG#: DE040-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.17	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.16 U	0.16	0.17	1
01363	Gamma BHC - Lindane	58-89-9	1.3	0.036	0.17	1
01363	Chlordane	57-74-9	0.84 U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.18 J	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.62	0.070	0.36	1
01363	Delta BHC	319-86-8	0.81	0.038	0.17	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.036 U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.7	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	21 U	21	70	20
10225	Aroclor 5442	12642-23-8	21 U	21	70	20
10225	Aroclor 5460	11126-42-4	21 U	21	70	20
10225	PCB-1016	12674-11-2	7.0 U	7.0	36	20
10225	PCB-1221	11104-28-2	11 U	11	36	20
10225	PCB-1232	11141-16-5	11 U	11	36	20
10225	PCB-1242	53469-21-9	11 U	11	36	20
10225	PCB-1248	12672-29-6	7.0 U	7.0	36	20
10225	PCB-1254	11097-69-1	7.0 U	7.0	36	20
10225	PCB-1260	11096-82-5	7.0 U	7.0	36	20
10225	PCB-1262	37324-23-5	7.0 U	7.0	36	20
10225	PCB-1268	11100-14-4	7.0 U	7.0	36	20

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD021 SDG#: DE040-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	9,560	5.20	20.7	1
07914	Boron	7440-42-8	3.56 J	0.919	5.17	1
01650	Calcium	7440-70-2	1,820	6.33	20.7	1
01654	Iron	7439-89-6	16,900	4.87	20.7	1
01656	Lithium	7439-93-2	19.8	0.23	2.1	1
01657	Magnesium	7439-95-4	3,980	2.62	10.3	1
06958	Manganese	7439-96-5	239	0.0806	0.517	1
10145	Phosphorus	7723-14-0	324	0.579	10.3	1
01662	Potassium	7440-09-7	2,920	18.6	51.7	1
01667	Sodium	7440-23-5	63.5 J	38.5	103	1
07968	Strontium	7440-24-6	7.16	0.0641	0.517	1
06969	Tin	7440-31-5	2.17 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,130	0.393	1.03	1
10146	Zirconium	7440-67-7	0.868 U	0.868	5.17	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0608 U	0.0608	0.203	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	2.43	0.0608	0.405	2
06126	Barium	7440-39-3	62.3	0.109	0.405	2
06127	Beryllium	7440-41-7	0.274	0.0162	0.101	2
06128	Cadmium	7440-43-9	0.0800 J	0.0365	0.101	2
06131	Chromium	7440-47-3	12.5	0.122	0.405	2
06132	Cobalt	7440-48-4	3.62	0.0203	0.101	2
06133	Copper	7440-50-8	4.44	0.0669	0.405	2
06135	Lead	7439-92-1	5.31	0.0105	0.203	2
06138	Molybdenum	7439-98-7	0.222	0.0507	0.101	2
06139	Nickel	7440-02-0	6.99	0.101	0.405	2
06141	Selenium	7782-49-2	0.0924 J	0.0405	0.405	2
06142	Silver	7440-22-4	0.0170 J	0.0122	0.101	2
06145	Thallium	7440-28-0	0.156	0.0304	0.101	2
06148	Vanadium	7440-62-2	26.8	0.0223	0.101	2
06149	Zinc	7440-66-6	42.6	0.567	3.04	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0029 U	0.0029	0.101	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.84 U	0.84	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.6	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21 U	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD021 SDG#: DE040-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	469	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
			SW-846 9045C modified	Std. Units	Std. Units	Std. Units
00394	22a pH by 9045C	n.a.	6.92	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	5.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 16:45	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 12:00	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 14:47	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 03:58	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 17:22	Lindsey K Lafferty	20
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD021 SDG#: DE040-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:19	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:02	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 00:19	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 04:49	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 16:32	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD018 SDG#: DE040-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U 180	550	1
04688	Benzyl alcohol	100-51-6	180	U 180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180	1
04688	4-Chloroaniline	106-47-8	74	U 74	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550	1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	24	J 18	370	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	74	U 74	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	37	U 37	180	1
04688	4-Methylphenol	106-44-5	37	U 37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	37	U 37	180	1
04688	4-Nitroaniline	100-01-6	74	U 74	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	550	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD018 SDG#: DE040-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37 U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37 U	37	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74 U	0.74	1.8	1
10138	Acenaphthylene	208-96-8	0.37 U	0.37	1.8	1
10138	Anthracene	120-12-7	0.65 J	0.37	1.8	1
10138	Benzo(a)anthracene	56-55-3	2.0	0.74	1.8	1
10138	Benzo(a)pyrene	50-32-8	2.2	0.74	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	4.7	0.74	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.2 J	0.74	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	2.0	0.74	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.7 U	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	6.7 U	6.7	20	1
10138	Chrysene	218-01-9	4.1	0.37	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.74 U	0.74	1.8	1
10138	Diethylphthalate	84-66-2	6.7 U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7 U	6.7	20	1
10138	Fluoranthene	206-44-0	8.0	0.74	1.8	1
10138	Fluorene	86-73-7	0.74 U	0.74	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1 J	0.74	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.74 U	0.74	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.74 U	0.74	1.8	1
10138	Naphthalene	91-20-3	1.5 J	0.74	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.74 U	0.74	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.7 U	6.7	20	1
10138	Phenanthrene	85-01-8	4.7	0.74	1.8	1
10138	Pyrene	129-00-0	5.4	0.74	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	4.0	1
10401	Dalapon	75-99-0	4.9 U	4.9	10	1
10401	2,4-DB	94-82-6	12 U	12	12	1
10401	Dicamba	1918-00-9	0.44 U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.89 U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89 U	0.89	1.9	1
10401	MCPA	94-74-6	760	84	280	1
10401	MCPP (Mecoprop)	93-65-2	200 J	83	280	1
10401	2,4,5-T	93-76-5	0.091 U	0.091	0.19	1
10401	2,4,5-TP	93-72-1	0.23	0.083	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD018 SDG#: DE040-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.073 U	0.073	0.18	1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.18	1
01363	Beta BHC	319-85-7	0.067 U	0.067	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.18	1
01363	Chlordane	57-74-9	0.89 U	0.89	3.8	1
01363	p,p-DDD	72-54-8	0.073 U	0.073	0.38	1
01363	p,p-DDE	72-55-9	0.20 U	0.20	0.38	1
01363	p,p-DDT	50-29-3	0.28 U	0.28	0.38	1
01363	Delta BHC	319-86-8	0.078 J	0.040	0.18	1
01363	Dieldrin	60-57-1	0.073 U	0.073	0.38	1
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.073 U	0.073	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.073 U	0.073	0.38	1
01363	Endrin	72-20-8	0.073 U	0.073	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.073 U	0.073	0.38	1
01363	Endrin Ketone	53494-70-5	0.073 U	0.073	0.38	1
01363	Heptachlor	76-44-8	0.12 J	0.067	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.13 U	0.13	0.18	1
01363	Methoxychlor	72-43-5	0.38 U	0.38	1.8	1
01363	Mirex	2385-85-5	0.073 U	0.073	0.38	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.3	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	3.7	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.55 U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.55 U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9	1
10225	PCB-1254	11097-69-1	1.1 J	0.37	1.9	1
10225	PCB-1260	11096-82-5	1.1 J	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9	1

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD018 SDG#: DE040-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,800	5.53	22.0	1
07914	Boron	7440-42-8	5.74	0.978	5.49	1
01650	Calcium	7440-70-2	3,310	6.74	22.0	1
01654	Iron	7439-89-6	20,100	5.18	22.0	1
01656	Lithium	7439-93-2	27.1	0.24	2.2	1
01657	Magnesium	7439-95-4	4,410	2.79	11.0	1
06958	Manganese	7439-96-5	306	0.0857	0.549	1
10145	Phosphorus	7723-14-0	394	0.615	11.0	1
01662	Potassium	7440-09-7	3,880	19.8	54.9	1
01667	Sodium	7440-23-5	71.2 J	41.0	110	1
07968	Strontium	7440-24-6	14.8	0.0681	0.549	1
06969	Tin	7440-31-5	2.55 J	1.10	11.0	1
06970	Titanium	7440-32-6	1,260	0.418	1.10	1
10146	Zirconium	7440-67-7	1.38 J	0.923	5.49	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0659 U	0.0659	0.220	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.12	0.0659	0.440	2
06126	Barium	7440-39-3	80.1	0.119	0.440	2
06127	Beryllium	7440-41-7	0.486	0.0176	0.110	2
06128	Cadmium	7440-43-9	0.166	0.0396	0.110	2
06131	Chromium	7440-47-3	15.9	0.132	0.440	2
06132	Cobalt	7440-48-4	4.39	0.0220	0.110	2
06133	Copper	7440-50-8	6.16	0.0725	0.440	2
06135	Lead	7439-92-1	7.20	0.0114	0.220	2
06138	Molybdenum	7439-98-7	0.468	0.0549	0.110	2
06139	Nickel	7440-02-0	9.70	0.110	0.440	2
06141	Selenium	7782-49-2	0.155 J	0.0440	0.440	2
06142	Silver	7440-22-4	0.0255 J	0.0132	0.110	2
06145	Thallium	7440-28-0	0.234	0.0330	0.110	2
06148	Vanadium	7440-62-2	28.6	0.0242	0.110	2
06149	Zinc	7440-66-6	54.9	0.615	3.30	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0097 J	0.0031	0.108	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.89	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.3	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.34 J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD018 SDG#: DE040-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	459	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.25	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	9.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 17:19	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 12:32	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 20:35	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 04:26	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 08:11	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 17:41	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD018 SDG#: DE040-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:22	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:22	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:22	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:03	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 00:33	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 05:13	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 16:48	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD016 SDG#: DE040-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700	1
04688	Benzoic acid	65-85-0	190	U 190	560	1
04688	Benzyl alcohol	100-51-6	190	U 190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190	1
04688	4-Chloroaniline	106-47-8	74	U 74	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560	1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	28	J 19	370	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	74	U 74	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	37	U 37	190	1
04688	4-Methylphenol	106-44-5	37	U 37	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	37	U 37	190	1
04688	4-Nitroaniline	100-01-6	74	U 74	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	560	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD016 SDG#: DE040-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19 U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19 U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37 U	37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37 U	37	190	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74 U	0.74	1.9	1
10138	Acenaphthylene	208-96-8	0.37 U	0.37	1.9	1
10138	Anthracene	120-12-7	0.37 U	0.37	1.9	1
10138	Benzo(a)anthracene	56-55-3	3.0	0.74	1.9	1
10138	Benzo(a)pyrene	50-32-8	5.6	0.74	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	12	0.74	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	3.1	0.74	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	5.1	0.74	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.7 U	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	6.7 U	6.7	20	1
10138	Chrysene	218-01-9	9.0	0.37	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.74 U	0.74	1.9	1
10138	Diethylphthalate	84-66-2	6.7 U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7 U	6.7	20	1
10138	Fluoranthene	206-44-0	16	0.74	1.9	1
10138	Fluorene	86-73-7	0.74 U	0.74	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.9	0.74	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.74 U	0.74	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.74 U	0.74	1.9	1
10138	Naphthalene	91-20-3	0.74 U	0.74	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.74 U	0.74	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.7 U	6.7	20	1
10138	Phenanthrene	85-01-8	5.5	0.74	1.9	1
10138	Pyrene	129-00-0	12	0.74	1.9	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	4.0	1
10401	Dalapon	75-99-0	4.9 U	4.9	10	1
10401	2,4-DB	94-82-6	3.2 U	3.2	3.2	1
10401	Dicamba	1918-00-9	0.45 U	0.45	1.3	1
10401	Dinoseb	88-85-7	0.89 U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89 U	0.89	1.9	1
10401	MCPA	94-74-6	430	85	280	1
10401	MCPP (Mecoprop)	93-65-2	430	84	280	1
10401	2,4,5-T	93-76-5	0.092 U	0.092	0.19	1
10401	2,4,5-TP	93-72-1	0.20	0.084	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD016 SDG#: DE040-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Aldrin	309-00-2	0.074 U	0.074	0.19	1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.19	1
01363	Beta BHC	319-85-7	0.067 U	0.067	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.19	1
01363	Chlordane	57-74-9	1.5 U	1.5	3.8	1
01363	p,p-DDD	72-54-8	0.28 U	0.28	0.38	1
01363	p,p-DDE	72-55-9	0.38 U	0.38	0.38	1
01363	p,p-DDT	50-29-3	0.99 U	0.99	0.99	1
01363	Delta BHC	319-86-8	0.040 U	0.040	0.19	1
01363	Dieldrin	60-57-1	0.088 U	0.088	0.38	1
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.19	1
01363	Endosulfan II	33213-65-9	0.074 U	0.074	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.074 U	0.074	0.38	1
01363	Endrin	72-20-8	0.074 U	0.074	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.15 U	0.15	0.38	1
01363	Endrin Ketone	53494-70-5	0.074 U	0.074	0.38	1
01363	Heptachlor	76-44-8	0.067 U	0.067	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.038 U	0.038	0.19	1
01363	Methoxychlor	72-43-5	0.38 U	0.38	1.9	1
01363	Mirex	2385-85-5	1.0 U	1.0	1.0	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.4	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	4.6	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9	1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9	1
10225	PCB-1260	11096-82-5	4.0	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9	1

Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	13,900	5.61	22.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD016 SDG#: DE040-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
07914	Boron	7440-42-8	4.30 J	0.993	5.58	1
01650	Calcium	7440-70-2	2,450	6.84	22.3	1
01654	Iron	7439-89-6	19,300	5.26	22.3	1
01656	Lithium	7439-93-2	22.0	0.25	2.2	1
01657	Magnesium	7439-95-4	4,220	2.83	11.2	1
06958	Manganese	7439-96-5	260	0.0871	0.558	1
10145	Phosphorus	7723-14-0	299	0.625	11.2	1
01662	Potassium	7440-09-7	2,780	20.1	55.8	1
01667	Sodium	7440-23-5	89.4 J	41.6	112	1
07968	Strontium	7440-24-6	14.0	0.0692	0.558	1
06969	Tin	7440-31-5	2.59 J	1.12	11.2	1
06970	Titanium	7440-32-6	1,270	0.424	1.12	1
10146	Zirconium	7440-67-7	1.30 J	0.938	5.58	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0657 U	0.0657	0.219	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.07	0.0657	0.438	2
06126	Barium	7440-39-3	69.7	0.118	0.438	2
06127	Beryllium	7440-41-7	0.468	0.0175	0.109	2
06128	Cadmium	7440-43-9	0.154	0.0394	0.109	2
06131	Chromium	7440-47-3	17.9	0.131	0.438	2
06132	Cobalt	7440-48-4	4.65	0.0219	0.109	2
06133	Copper	7440-50-8	6.70	0.0722	0.438	2
06135	Lead	7439-92-1	6.00	0.0114	0.219	2
06138	Molybdenum	7439-98-7	0.377	0.0547	0.109	2
06139	Nickel	7440-02-0	10.3	0.109	0.438	2
06141	Selenium	7782-49-2	0.0957 J	0.0438	0.438	2
06142	Silver	7440-22-4	0.0265 J	0.0131	0.109	2
06145	Thallium	7440-28-0	0.214	0.0328	0.109	2
06148	Vanadium	7440-62-2	32.7	0.0241	0.109	2
06149	Zinc	7440-66-6	62.4	0.613	3.28	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0469 J	0.0032	0.110	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0	0.89	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.0 U	10.0	33.5	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.81 J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD016 SDG#: DE040-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	467	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.00	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	10.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 17:54	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 13:04	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 21:02	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 04:40	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 09:44	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 18:00	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SD016 SDG#: DE040-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:25	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:25	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:25	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:04	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 00:47	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 05:37	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 17:12	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL153 SDG#: DE040-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580	1
04688	Benizidine	92-87-5	1,300	U 1,300	3,800	1
04688	Benzo(a)pyrene	50-32-8	19	J 19	190	1
04688	Benzoic acid	65-85-0	190	U 190	580	1
04688	Benzyl alcohol	100-51-6	190	U 190	580	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Di-n-butylphthalate	84-74-2	23	J 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190	1
04688	4-Chloroaniline	106-47-8	77	U 77	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580	1
04688	2,4-Dinitrophenol	51-28-5	770	U 770	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	51	J 19	380	1
04688	Fluoranthene	206-44-0	20	J 19	190	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	38	U 38	190	1
04688	4-Methylphenol	106-44-5	38	U 38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	38	U 38	190	1
04688	4-Nitroaniline	100-01-6	77	U 77	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	580	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL153 SDG#: DE040-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	580	1
04688	Phenol	108-95-2	19	U 19	190	1
04688	Pyrene	129-00-0	22	J 19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.8	U 3.8	9.6	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.6	5
10138	Anthracene	120-12-7	1.9	U 1.9	9.6	5
10138	Benzo(a)anthracene	56-55-3	6.1	J 3.8	9.6	5
10138	Benzo(b)fluoranthene	205-99-2	13	3.8	9.6	5
10138	Benzo(g,h,i)perylene	191-24-2	4.4	J 3.8	9.6	5
10138	Benzo(k)fluoranthene	207-08-9	3.8	U 3.8	9.6	5
10138	Butylbenzylphthalate	85-68-7	35	U 35	100	5
10138	Chrysene	218-01-9	11	1.9	9.6	5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U 3.8	9.6	5
10138	Diethylphthalate	84-66-2	35	U 35	100	5
10138	Dimethylphthalate	131-11-3	35	U 35	100	5
10138	Fluorene	86-73-7	3.8	U 3.8	9.6	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U 3.8	9.6	5
10138	1-Methylnaphthalene	90-12-0	5.0	J 3.8	9.6	5
10138	2-Methylnaphthalene	91-57-6	6.4	J 3.8	9.6	5
10138	Naphthalene	91-20-3	27	3.8	9.6	5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U 3.8	9.6	5
10138	Di-n-octylphthalate	117-84-0	35	U 35	100	5
10138	Phenanthrene	85-01-8	10	3.8	9.6	5
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.4	U 1.4	4.1	1
10401	Dalapon	75-99-0	5.1	U 5.1	10	1
10401	2,4-DB	94-82-6	8.6	U 8.6	8.6	1
10401	Dicamba	1918-00-9	0.46	U 0.46	1.4	1
10401	Dinoseb	88-85-7	0.92	U 0.92	2.8	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U 0.92	2.0	1
10401	MCPA	94-74-6	300	88	290	1
10401	MCPP (Mecoprop)	93-65-2	180	U 180	180	1
10401	2,4,5-T	93-76-5	0.094	U 0.094	0.20	1
10401	2,4,5-TP	93-72-1	0.086	U 0.086	0.20	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL153 SDG#: DE040-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19	1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19	1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19	1
01363	Chlordane	57-74-9	0.92 U	0.92	3.9	1
01363	p,p-DDD	72-54-8	0.23 U	0.23	0.39	1
01363	p,p-DDE	72-55-9	0.24 U	0.24	0.39	1
01363	p,p-DDT	50-29-3	0.88 U	0.88	0.88	1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19	1
01363	Dieldrin	60-57-1	0.16 U	0.16	0.39	1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19	1
01363	Endosulfan II	33213-65-9	0.12 U	0.12	0.39	1
01363	Endosulfan Sulfate	1031-07-8	0.10 U	0.10	0.39	1
01363	Endrin	72-20-8	0.076 U	0.076	0.39	1
01363	Endrin Aldehyde	7421-93-4	0.20 U	0.20	0.39	1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39	1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19	1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9	1
01363	Mirex	2385-85-5	0.076 U	0.076	0.39	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.3 U	2.3	7.6	2
10225	Aroclor 5442	12642-23-8	2.3 U	2.3	7.6	2
10225	Aroclor 5460	11126-42-4	110	2.3	7.6	2
10225	PCB-1016	12674-11-2	0.76 U	0.76	3.9	2
10225	PCB-1221	11104-28-2	1.2 U	1.2	3.9	2
10225	PCB-1232	11141-16-5	1.2 U	1.2	3.9	2
10225	PCB-1242	53469-21-9	1.2 U	1.2	3.9	2
10225	PCB-1248	12672-29-6	0.76 U	0.76	3.9	2
10225	PCB-1254	11097-69-1	26	0.76	3.9	2
10225	PCB-1260	11096-82-5	38	0.76	3.9	2
10225	PCB-1262	37324-23-5	0.76 U	0.76	3.9	2
10225	PCB-1268	11100-14-4	0.76 U	0.76	3.9	2

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL153 SDG#: DE040-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,300	5.57	22.2	1
07914	Boron	7440-42-8	6.46	0.986	5.54	1
01650	Calcium	7440-70-2	3,630	6.79	22.2	1
01654	Iron	7439-89-6	21,400	5.22	22.2	1
01656	Lithium	7439-93-2	17.3	0.24	2.2	1
01657	Magnesium	7439-95-4	4,110	2.81	11.1	1
06958	Manganese	7439-96-5	274	0.0864	0.554	1
10145	Phosphorus	7723-14-0	336	0.620	11.1	1
01662	Potassium	7440-09-7	3,000	19.9	55.4	1
01667	Sodium	7440-23-5	121	41.3	111	1
07968	Strontium	7440-24-6	26.8	0.0687	0.554	1
06969	Tin	7440-31-5	2.54 J	1.11	11.1	1
06970	Titanium	7440-32-6	1,260	0.421	1.11	1
10146	Zirconium	7440-67-7	2.00 J	0.931	5.54	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.143 J	0.0678	0.226	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.42	0.0678	0.452	2
06126	Barium	7440-39-3	97.2	0.122	0.452	2
06127	Beryllium	7440-41-7	0.567	0.0181	0.113	2
06128	Cadmium	7440-43-9	0.296	0.0407	0.113	2
06131	Chromium	7440-47-3	25.1	0.136	0.452	2
06132	Cobalt	7440-48-4	6.13	0.0226	0.113	2
06133	Copper	7440-50-8	11.0	0.0745	0.452	2
06135	Lead	7439-92-1	32.4	0.0117	0.226	2
06138	Molybdenum	7439-98-7	0.509	0.0565	0.113	2
06139	Nickel	7440-02-0	16.0	0.113	0.452	2
06141	Selenium	7782-49-2	0.117 J	0.0452	0.452	2
06142	Silver	7440-22-4	0.108 J	0.0136	0.113	2
06145	Thallium	7440-28-0	0.232	0.0339	0.113	2
06148	Vanadium	7440-62-2	41.9	0.0248	0.113	2
06149	Zinc	7440-66-6	84.1	0.633	3.39	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0513 J	0.0032	0.111	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2	0.92	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.6	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.4	0.23	1.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL153 SDG#: DE040-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	501	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.84	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	13.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 18:28	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 13:38	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 21:30	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 06:19	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 10:02	Lindsey K Lafferty	2
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 18:18	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL153 SDG#: DE040-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:28	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:28	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:28	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:05	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 01:01	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 06:25	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 17:28	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL155 SDG#: DE040-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170	1
04688	4-Chloroaniline	106-47-8	70	U 70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	31	J 17	350	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	35	U 35	170	1
04688	4-Methylphenol	106-44-5	35	U 35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	35	U 35	170	1
04688	4-Nitroaniline	100-01-6	70	U 70	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL155 SDG#: DE040-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17	U 17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U 17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	2.0	0.70	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.7	1
10138	Anthracene	120-12-7	2.3	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	9.7	0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	9.4	0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	17	0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	3.7	0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	5.0	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3	U 6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U 6.3	19	1
10138	Chrysene	218-01-9	15	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	1.2	J 0.70	1.7	1
10138	Diethylphthalate	84-66-2	6.3	U 6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U 6.3	19	1
10138	Fluoranthene	206-44-0	24	0.70	1.7	1
10138	Fluorene	86-73-7	0.92	J 0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.4	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	1.2	J 0.70	1.7	1
10138	2-Methylnaphthalene	91-57-6	1.3	J 0.70	1.7	1
10138	Naphthalene	91-20-3	1.2	J 0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U 0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3	U 6.3	19	1
10138	Phenanthrene	85-01-8	18	0.70	1.7	1
10138	Pyrene	129-00-0	21	0.70	1.7	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3	U 1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U 4.6	9.4	1
10401	2,4-DB	94-82-6	9.2	U 9.2	9.2	1
10401	Dicamba	1918-00-9	0.48	J 0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U 0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.2	J 0.84	1.8	1
10401	MCPA	94-74-6	810	79	260	1
10401	MCPP (Mecoprop)	93-65-2	290	78	260	1
10401	2,4,5-T	93-76-5	0.15	J 0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U 0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

The LCS recovery for 2,4-DP is outside the QC limits. Results from the reextraction are within the limits. 2,4-DP was detected in the in the original extracted sample at 1.1 ug/kg. The reextracted sample did not

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL155 SDG#: DE040-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
contain 2,4-DP. This is due to the homogeneity of the sample. The hold time had expired prior to the reextraction so all results are reported from the original extract.						
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.38	0.036	0.17	1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	7.3 U	7.3	7.3	5
01363	Chlordane	57-74-9	2.3 U	2.3	3.6	1
01363	p,p-DDD	72-54-8	0.14 U	0.14	0.36	1
01363	p,p-DDE	72-55-9	0.34 U	0.34	0.36	1
01363	p,p-DDT	50-29-3	1.3 U	1.3	1.3	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.15 U	0.15	0.36	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.098 U	0.098	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.36	1
01363	Endrin	72-20-8	0.10 J	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.069 U	0.069	0.36	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.36	1
01363	Heptachlor	76-44-8	1.3 U	1.3	3.5	20
01363	Heptachlor Epoxide	1024-57-3	0.036 U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.7	1
01363	Mirex	2385-85-5	0.069 U	0.069	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0 U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0 U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0 U	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34 U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52 U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54 U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52 U	0.52	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL155 SDG#: DE040-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	PCB-1248	12672-29-6	0.34 U	0.34	1.8	1
10225	PCB-1254	11097-69-1	3.5	0.34	1.8	1
10225	PCB-1260	11096-82-5	1.8	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34 U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34 U	0.34	1.8	1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,300	5.20	20.7	1
07914	Boron	7440-42-8	5.26	0.921	5.17	1
01650	Calcium	7440-70-2	3,280	6.34	20.7	1
01654	Iron	7439-89-6	25,700	4.87	20.7	1
01656	Lithium	7439-93-2	24.4	0.23	2.1	1
01657	Magnesium	7439-95-4	4,760	2.63	10.3	1
06958	Manganese	7439-96-5	331	0.0807	0.517	1
10145	Phosphorus	7723-14-0	483	0.579	10.3	1
01662	Potassium	7440-09-7	3,820	18.6	51.7	1
01667	Sodium	7440-23-5	107	38.6	103	1
07968	Strontium	7440-24-6	25.0	0.0641	0.517	1
06969	Tin	7440-31-5	2.58 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,440	0.393	1.03	1
10146	Zirconium	7440-67-7	1.99 J	0.869	5.17	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.148 J	0.0615	0.205	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.13	0.0615	0.410	2
06126	Barium	7440-39-3	84.6	0.111	0.410	2
06127	Beryllium	7440-41-7	0.526	0.0164	0.102	2
06128	Cadmium	7440-43-9	0.121	0.0369	0.102	2
06131	Chromium	7440-47-3	22.3	0.123	0.410	2
06132	Cobalt	7440-48-4	4.68	0.0205	0.102	2
06133	Copper	7440-50-8	8.75	0.0676	0.410	2
06135	Lead	7439-92-1	6.90	0.0107	0.205	2
06138	Molybdenum	7439-98-7	0.561	0.0512	0.102	2
06139	Nickel	7440-02-0	13.3	0.102	0.410	2
06141	Selenium	7782-49-2	0.0925 J	0.0410	0.410	2
06142	Silver	7440-22-4	0.0459 J	0.0123	0.102	2
06145	Thallium	7440-28-0	0.200	0.0307	0.102	2
06148	Vanadium	7440-62-2	32.0	0.0225	0.102	2
06149	Zinc	7440-66-6	50.5	0.574	3.07	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0084 J	0.0030	0.103	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL155 SDG#: DE040-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 300.0						
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5	0.84	1.0	1
EPA 314.0						
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.3	1
SW-846 7199						
05892	3a Cr VI by EPA 7199	18540-29-9	0.47 J	0.21	1.0	1
ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	393	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	6.82	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	4.3	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 19:03	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 14:11	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 21:58	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 06:33	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 06:47	Jamie L Brillhart	5
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/20/2011 22:43	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 18:37	Lindsey K Lafferty	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

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14420 Albemarle Point Place
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Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL155 SDG#: DE040-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:07	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 01:44	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 06:49	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 18:00	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL155 SDG#: DE040-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL149 SDG#: DE040-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U 170	520	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U 170	520	1
04688	Benzyl alcohol	100-51-6	170	U 170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U 17	170	1
04688	Carbazole	86-74-8	17	U 17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	170	1
04688	4-Chloroaniline	106-47-8	70	U 70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U 17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U 17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U 17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U 17	170	1
04688	2-Chlorophenol	95-57-8	17	U 17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	170	1
04688	Dibenzofuran	132-64-9	17	U 17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U 17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U 17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U 17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U 100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U 17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U 170	520	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U 17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U 17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	170	J 17	350	1
04688	Hexachlorobenzene	118-74-1	17	U 17	170	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U 170	520	1
04688	Hexachloroethane	67-72-1	17	U 17	170	1
04688	Isophorone	78-59-1	17	U 17	170	1
04688	2-Methylphenol	95-48-7	35	U 35	170	1
04688	4-Methylphenol	106-44-5	35	U 35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	17	U 17	170	1
04688	3-Nitroaniline	99-09-2	35	U 35	170	1
04688	4-Nitroaniline	100-01-6	70	U 70	170	1
04688	Nitrobenzene	98-95-3	17	U 17	170	1
04688	2-Nitrophenol	88-75-5	17	U 17	170	1
04688	4-Nitrophenol	100-02-7	170	U 170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U 17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U 17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	170	U 170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL149 SDG#: DE040-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	17 U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17 U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	170	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70 U	0.70	1.7	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.7	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	2.1	0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	2.8	0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	5.5	0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	2.6	0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	1.6 J	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3 U	6.3	19	1
10138	Chrysene	218-01-9	3.8	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70 U	0.70	1.7	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	4.3	0.70	1.7	1
10138	Fluorene	86-73-7	0.70 U	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.3 J	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.93 J	0.70	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.91 J	0.70	1.7	1
10138	Naphthalene	91-20-3	0.94 J	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	2.9	0.70	1.7	1
10138	Pyrene	129-00-0	3.9	0.70	1.7	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.4	1
10401	2,4-DB	94-82-6	0.65 U	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84 U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84 U	0.84	1.8	1
10401	MCPA	94-74-6	570	79	260	1
10401	MCPP (Mecoprop)	93-65-2	200 U	200	200	1
10401	2,4,5-T	93-76-5	0.23 U	0.23	0.23	1
10401	2,4,5-TP	93-72-1	0.078 U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL149 SDG#: DE040-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
cases, the reporting limits have been raised. The following compounds were affected: MCPP and 2,4,5-T.						
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.						
Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035 U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035 U	0.035	0.17	1
01363	Chlordane	57-74-9	0.84 U	0.84	3.5	1
01363	p,p-DDD	72-54-8	0.19 U	0.19	0.35	1
01363	p,p-DDE	72-55-9	0.25 U	0.25	0.35	1
01363	p,p-DDT	50-29-3	1.3 U	1.3	1.3	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.85 U	0.85	0.85	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069 U	0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.35	1
01363	Endrin	72-20-8	0.11 U	0.11	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.19 U	0.19	0.35	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.12 U	0.12	0.17	1
01363	Methoxychlor	72-43-5	0.35 U	0.35	1.7	1
01363	Mirex	2385-85-5	0.069 U	0.069	0.35	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs	SW-846 8082	ug/kg		ug/kg		ug/kg	
10225 Aroclor 5432	63496-31-1	1.0	U	1.0		3.4	1
10225 Aroclor 5442	12642-23-8	1.0	U	1.0		3.4	1
10225 Aroclor 5460	11126-42-4	5.0		1.0		3.4	1
10225 PCB-1016	12674-11-2	0.34	U	0.34		1.8	1
10225 PCB-1221	11104-28-2	0.52	U	0.52		1.8	1
10225 PCB-1232	11141-16-5	0.54	U	0.54		1.8	1
10225 PCB-1242	53469-21-9	0.52	U	0.52		1.8	1
10225 PCB-1248	12672-29-6	0.34	U	0.34		1.8	1
10225 PCB-1254	11097-69-1	0.34	U	0.34		1.8	1
10225 PCB-1260	11096-82-5	3.0		0.34		1.8	1
10225 PCB-1262	37324-23-5	0.34	U	0.34		1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL149 SDG#: DE040-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs						
10225	PCB-1268	SW-846 8082 11100-14-4	ug/kg 0.34 U	ug/kg 0.34	ug/kg 1.8	1
Metals						
		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,000	5.20	20.7	1
07914	Boron	7440-42-8	5.93	0.920	5.17	1
01650	Calcium	7440-70-2	3,370	6.34	20.7	1
01654	Iron	7439-89-6	22,600	4.87	20.7	1
01656	Lithium	7439-93-2	21.9	0.23	2.1	1
01657	Magnesium	7439-95-4	4,170	2.63	10.3	1
06958	Manganese	7439-96-5	294	0.0806	0.517	1
10145	Phosphorus	7723-14-0	382	0.579	10.3	1
01662	Potassium	7440-09-7	3,020	18.6	51.7	1
01667	Sodium	7440-23-5	122	38.5	103	1
07968	Strontium	7440-24-6	18.8	0.0641	0.517	1
06969	Tin	7440-31-5	2.46 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,310	0.393	1.03	1
10146	Zirconium	7440-67-7	1.39 J	0.868	5.17	1
		SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0979 J	0.0626	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.28	0.0626	0.418	2
06126	Barium	7440-39-3	83.5	0.113	0.418	2
06127	Beryllium	7440-41-7	0.554	0.0167	0.104	2
06128	Cadmium	7440-43-9	0.365	0.0376	0.104	2
06131	Chromium	7440-47-3	36.3	0.125	0.418	2
06132	Cobalt	7440-48-4	6.07	0.0209	0.104	2
06133	Copper	7440-50-8	10.8	0.0689	0.418	2
06135	Lead	7439-92-1	14.4	0.0109	0.209	2
06138	Molybdenum	7439-98-7	1.07	0.0522	0.104	2
06139	Nickel	7440-02-0	22.3	0.104	0.418	2
06141	Selenium	7782-49-2	0.130 J	0.0418	0.418	2
06142	Silver	7440-22-4	0.0767 J	0.0125	0.104	2
06145	Thallium	7440-28-0	0.262	0.0313	0.104	2
06148	Vanadium	7440-62-2	37.8	0.0230	0.104	2
06149	Zinc	7440-66-6	289	1.46	7.83	5
		SW-846 7471A	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0199 J	0.0029	0.101	1
Wet Chemistry						
		EPA 300.0	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.84	1.0	1
		EPA 314.0	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4 U	9.4	31.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

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Submitted: 12/16/2010 10:00

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SL149 SDG#: DE040-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
05892	3a Cr VI by EPA 7199	18540-29-9	mg/kg 0.59 J	mg/kg 0.21	mg/kg 1.0	1
ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	mV 433	mV 10.0	mV 10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	Std. Units 7.48	Std. Units 0.0100	Std. Units 0.0100	1
Wet Chemistry						
11624	28a Moisture Content by 160.3	n.a.	% 4.2	% 0.50	% 0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 19:37	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 14:44	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 22:25	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 07:01	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 18:28	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
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Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

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14420 Albemarle Point Place
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Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL149 SDG#: DE040-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:34	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:34	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:34	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/31/2010 07:16	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:08	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 01:58	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 07:13	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 18:08	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL156 SDG#: DE040-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	72	U 72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	72	U 72	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540	1
04688	Phenol	108-95-2	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL156 SDG#: DE040-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	58	0.72	1.8	1
10138	Acenaphthylene	208-96-8	55	0.36	1.8	1
10138	Anthracene	120-12-7	230	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	550	7.2	18	10
10138	Benzo(a)pyrene	50-32-8	410	7.2	18	10
10138	Benzo(b)fluoranthene	205-99-2	440	7.2	18	10
10138	Benzo(g,h,i)perylene	191-24-2	160	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	210	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U 6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U 6.4	19	1
10138	Chrysene	218-01-9	660	3.6	18	10
10138	Dibenz(a,h)anthracene	53-70-3	46	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.6	J 6.4	19	1
10138	Fluoranthene	206-44-0	970	7.2	18	10
10138	Fluorene	86-73-7	190	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	140	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	330	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	340	0.72	1.8	1
10138	Naphthalene	91-20-3	330	7.2	18	10
10138	N-Nitrosodimethylamine	62-75-9	0.72	U 0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U 6.4	19	1
10138	Phenanthrene	85-01-8	1,800	7.2	18	10
10138	Pyrene	129-00-0	1,400	7.2	18	10
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	2.2	J 1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U 4.7	9.7	1
10401	2,4-DB	94-82-6	14	U 14	14	1
10401	Dicamba	1918-00-9	0.80	J 0.43	1.3	1
10401	Dinoseb	88-85-7	0.86	U 0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.97	J 0.86	1.8	1
10401	MCPA	94-74-6	680	82	270	1
10401	MCPP (Mecoprop)	93-65-2	580	81	270	1
10401	2,4,5-T	93-76-5	0.088	U 0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.081	U 0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

The LCS recovery for 2,4-DP is outside the QC limits. Results from the reextraction are within the limits. 2,4-DP was detected in the in the original extracted sample at 0.90 ug/kg. The reextracted sample did not

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL156 SDG#: DE040-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
contain 2,4-DP. This is due to the homogeneity of the sample. The hold time had expired prior to the reextraction so all results are reported from the original extract.						
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.						
Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363 Aldrin	309-00-2	1.4	U	1.4	3.6	20
01363 Alpha BHC	319-84-6	0.73	U	0.73	3.6	20
01363 Beta BHC	319-85-7	1.3	U	1.3	3.6	20
01363 Gamma BHC - Lindane	58-89-9	0.73	U	0.73	3.6	20
01363 Chlordane	57-74-9	17	U	17	73	20
01363 p,p-DDD	72-54-8	1.4	U	1.4	7.3	20
01363 p,p-DDE	72-55-9	8.4	U	8.4	8.4	20
01363 p,p-DDT	50-29-3	20	U	20	20	20
01363 Delta BHC	319-86-8	0.77	U	0.77	3.6	20
01363 Dieldrin	60-57-1	4.5	U	4.5	7.3	20
01363 Endosulfan I	959-98-8	0.95	U	0.95	3.6	20
01363 Endosulfan II	33213-65-9	1.4	U	1.4	7.3	20
01363 Endosulfan Sulfate	1031-07-8	5.6	U	5.6	7.3	20
01363 Endrin	72-20-8	1.4	U	1.4	7.3	20
01363 Endrin Aldehyde	7421-93-4	1.4	U	1.4	7.3	20
01363 Endrin Ketone	53494-70-5	1.4	U	1.4	7.3	20
01363 Heptachlor	76-44-8	2.1	U	2.1	3.6	20
01363 Heptachlor Epoxide	1024-57-3	16	U	16	16	20
01363 Methoxychlor	72-43-5	7.3	U	7.3	36	20
01363 Mirex	2385-85-5	1.4	U	1.4	7.3	20
01363 Toxaphene	8001-35-2	47	U	47	140	20

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225 Aroclor 5432	63496-31-1	11	U	11	35	10
10225 Aroclor 5442	12642-23-8	11	U	11	35	10
10225 Aroclor 5460	11126-42-4	36		11	35	10
10225 PCB-1016	12674-11-2	3.5	U	3.5	18	10
10225 PCB-1221	11104-28-2	5.4	U	5.4	18	10
10225 PCB-1232	11141-16-5	5.6	U	5.6	18	10
10225 PCB-1242	53469-21-9	5.4	U	5.4	18	10
10225 PCB-1248	12672-29-6	280		3.5	18	10
10225 PCB-1254	11097-69-1	350		3.5	18	10
10225 PCB-1260	11096-82-5	50		3.5	18	10

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL156 SDG#: DE040-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	3.5 U	3.5	18	10
10225	PCB-1268	11100-14-4	3.5 U	3.5	18	10
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,200	5.35	21.3	1
07914	Boron	7440-42-8	7.79	0.946	5.32	1
01650	Calcium	7440-70-2	3,270	6.52	21.3	1
01654	Iron	7439-89-6	22,300	5.01	21.3	1
01656	Lithium	7439-93-2	19.5	0.23	2.1	1
01657	Magnesium	7439-95-4	4,010	2.70	10.6	1
06958	Manganese	7439-96-5	371	0.0830	0.532	1
10145	Phosphorus	7723-14-0	310	0.596	10.6	1
01662	Potassium	7440-09-7	3,620	19.1	53.2	1
01667	Sodium	7440-23-5	110	39.7	106	1
07968	Strontium	7440-24-6	22.1	0.0659	0.532	1
06969	Tin	7440-31-5	2.51 J	1.06	10.6	1
06970	Titanium	7440-32-6	1,340	0.404	1.06	1
10146	Zirconium	7440-67-7	2.60 J	0.893	5.32	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.115 J	0.0638	0.213	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.15	0.0638	0.425	2
06126	Barium	7440-39-3	96.7	0.115	0.425	2
06127	Beryllium	7440-41-7	0.551	0.0170	0.106	2
06128	Cadmium	7440-43-9	4.35	0.0383	0.106	2
06131	Chromium	7440-47-3	25.9	0.128	0.425	2
06132	Cobalt	7440-48-4	5.49	0.0213	0.106	2
06133	Copper	7440-50-8	18.5	0.0702	0.425	2
06135	Lead	7439-92-1	43.0	0.0111	0.213	2
06138	Molybdenum	7439-98-7	0.983	0.0532	0.106	2
06139	Nickel	7440-02-0	14.6	0.106	0.425	2
06141	Selenium	7782-49-2	0.0985 J	0.0425	0.425	2
06142	Silver	7440-22-4	0.129	0.0128	0.106	2
06145	Thallium	7440-28-0	0.247	0.0319	0.106	2
06148	Vanadium	7440-62-2	35.9	0.0234	0.106	2
06149	Zinc	7440-66-6	69.1	0.596	3.19	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0880 J	0.0030	0.103	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1	0.86	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL156 SDG#: DE040-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		SW-846 7199	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.6	0.21	1.1	1
		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	440	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.03	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 20:12	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 15:17	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 20:54	Gregory J Drahovsky	10
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 22:53	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 07:29	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 18:47	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL156 SDG#: DE040-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:37	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:09	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 02:41	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 08:25	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 18:32	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL156 SDG#: DE040-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL150 SDG#: DE040-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U 18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	70	U 70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	Diethylphthalate	84-66-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	Dimethylphthalate	131-11-3	18	U 18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	48	J 18	350	1
04688	Fluoranthene	206-44-0	19	J 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	70	U 70	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL150 SDG#: DE040-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	
04688	N-Nitrosodiphenylamine	86-30-6	18 U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	18 U	18	180	1
04688	Pentachlorophenol	87-86-5	180 U	180	530	1
04688	Phenol	108-95-2	18 U	18	180	1
04688	Pyrene	129-00-0	22 J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles SW-846 8270C SIM		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.5 U	3.5	8.8	5
10138	Acenaphthylene	208-96-8	1.8 J	1.8	8.8	5
10138	Anthracene	120-12-7	1.8 U	1.8	8.8	5
10138	Benzo(a)anthracene	56-55-3	6.6 J	3.5	8.8	5
10138	Benzo(a)pyrene	50-32-8	7.1 J	3.5	8.8	5
10138	Benzo(b)fluoranthene	205-99-2	14	3.5	8.8	5
10138	Benzo(g,h,i)perylene	191-24-2	4.3 J	3.5	8.8	5
10138	Benzo(k)fluoranthene	207-08-9	5.1 J	3.5	8.8	5
10138	Chrysene	218-01-9	11	1.8	8.8	5
10138	Dibenz(a,h)anthracene	53-70-3	3.5 U	3.5	8.8	5
10138	Fluorene	86-73-7	3.5 U	3.5	8.8	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.5 U	3.5	8.8	5
10138	1-Methylnaphthalene	90-12-0	3.5 U	3.5	8.8	5
10138	2-Methylnaphthalene	91-57-6	4.5 J	3.5	8.8	5
10138	Naphthalene	91-20-3	24	3.5	8.8	5
10138	N-Nitrosodimethylamine	62-75-9	3.5 U	3.5	8.8	5
10138	Phenanthrene	85-01-8	7.5 J	3.5	8.8	5
Reporting limits were raised due to interference from the sample matrix.						
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.5	1
10401	2,4-DB	94-82-6	0.65 U	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84 U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84 U	0.84	1.8	1
10401	MCPA	94-74-6	390	80	260	1
10401	MCPP (Mecoprop)	93-65-2	350 U	350	350	1
10401	2,4,5-T	93-76-5	0.18 U	0.18	0.18	1
10401	2,4,5-TP	93-72-1	0.079 U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL150 SDG#: DE040-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Despite numerous cleanup methods, our usual reporting limits were not attained.						
Perchlorate						
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007 14797-73-0	ug/kg 2.2 U	ug/kg 2.2	ug/kg 5.3	1
Pesticides/PCBs						
		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069 U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.078 J	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.040 U	0.040	0.17	1
01363	Chlordane	57-74-9	1.8 U	1.8	3.6	1
01363	p,p-DDD	72-54-8	0.28 U	0.28	0.36	1
01363	p,p-DDE	72-55-9	0.69 U	0.69	0.69	1
01363	p,p-DDT	50-29-3	1.8 U	1.8	1.8	1
01363	Delta BHC	319-86-8	0.059 J	0.038	0.17	1
01363	Dieldrin	60-57-1	0.48 U	0.48	0.48	1
01363	Endosulfan I	959-98-8	0.046 U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069 U	0.069	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069 U	0.069	0.36	1
01363	Endrin	72-20-8	0.069 U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.11 U	0.11	0.36	1
01363	Endrin Ketone	53494-70-5	0.069 U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.19 U	0.19	0.19	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.7	1
01363	Mirex	2385-85-5	0.73 U	0.73	0.73	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	6.9	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs						
		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	4.4	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	3.9	0.35	1.8	1
10225	PCB-1260	11096-82-5	2.4	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL150 SDG#: DE040-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,500	5.19	20.6	1
07914	Boron	7440-42-8	5.99	0.918	5.16	1
01650	Calcium	7440-70-2	3,330	6.33	20.6	1
01654	Iron	7439-89-6	25,100	4.86	20.6	1
01656	Lithium	7439-93-2	27.3	0.23	2.1	1
01657	Magnesium	7439-95-4	5,180	2.62	10.3	1
06958	Manganese	7439-96-5	286	0.0805	0.516	1
10145	Phosphorus	7723-14-0	369	0.578	10.3	1
01662	Potassium	7440-09-7	3,360	18.6	51.6	1
01667	Sodium	7440-23-5	117	38.5	103	1
07968	Strontium	7440-24-6	20.1	0.0640	0.516	1
06969	Tin	7440-31-5	2.89 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,260	0.392	1.03	1
10146	Zirconium	7440-67-7	0.993 J	0.867	5.16	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.139 J	0.0632	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.71	0.0632	0.421	2
06126	Barium	7440-39-3	96.5	0.114	0.421	2
06127	Beryllium	7440-41-7	0.635	0.0168	0.105	2
06128	Cadmium	7440-43-9	0.286	0.0379	0.105	2
06131	Chromium	7440-47-3	34.9	0.126	0.421	2
06132	Cobalt	7440-48-4	6.56	0.0211	0.105	2
06133	Copper	7440-50-8	11.2	0.0695	0.421	2
06135	Lead	7439-92-1	18.1	0.0109	0.211	2
06138	Molybdenum	7439-98-7	0.997	0.0526	0.105	2
06139	Nickel	7440-02-0	21.9	0.105	0.421	2
06141	Selenium	7782-49-2	0.143 J	0.0421	0.421	2
06142	Silver	7440-22-4	0.0714 J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.233	0.0316	0.105	2
06148	Vanadium	7440-62-2	43.8	0.0232	0.105	2
06149	Zinc	7440-66-6	91.7	0.589	3.16	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0135 J	0.0030	0.104	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0	0.84	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.6	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.82 J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL150 SDG#: DE040-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	440	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.69	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 20:46	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 15:49	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 23:20	Sarah M Snyder	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103500020A	12/21/2010 18:28	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 07:43	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 20:19	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103500020A	12/17/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL150 SDG#: DE040-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:40	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:40	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:10	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 02:55	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 08:50	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 18:48	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL181 SDG#: DE040-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	72	U 72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	72	U 72	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	540	1
04688	Phenol	108-95-2	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL181 SDG#: DE040-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36 U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36 U	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72 U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36 U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.72 U	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.72 U	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.93 J	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.72 U	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.72 U	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5 U	6.5	20	1
10138	Di-n-butylphthalate	84-74-2	6.5 U	6.5	20	1
10138	Chrysene	218-01-9	0.79 J	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	20	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5 U	6.5	20	1
10138	Fluoranthene	206-44-0	0.94 J	0.72	1.8	1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72 U	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20	1
10138	Phenanthrene	85-01-8	0.78 J	0.72	1.8	1
10138	Pyrene	129-00-0	0.84 J	0.72	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8 U	4.8	9.8	1
10401	2,4-DB	94-82-6	6.3 U	6.3	6.3	1
10401	Dicamba	1918-00-9	0.43 U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.87 U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87 U	0.87	1.8	1
10401	MCPA	94-74-6	83 U	83	270	1
10401	MCPP (Mecoprop)	93-65-2	330 U	82	270	1
10401	2,4,5-T	93-76-5	0.089 U	0.089	0.18	1
10401	2,4,5-TP	93-72-1	0.082 U	0.082	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL181 SDG#: DE040-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Aldrin	309-00-2	0.072 U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.12 U	0.12	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037 U	0.037	0.18	1
01363	Chlordane	57-74-9	0.87 U	0.87	3.7	1
01363	p,p-DDD	72-54-8	0.14 U	0.14	0.37	1
01363	p,p-DDE	72-55-9	0.26 U	0.26	0.37	1
01363	p,p-DDT	50-29-3	0.58 U	0.58	0.58	1
01363	Delta BHC	319-86-8	0.045 J	0.039	0.18	1
01363	Dieldrin	60-57-1	0.077 U	0.077	0.37	1
01363	Endosulfan I	959-98-8	0.048 U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.072 U	0.072	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.52 U	0.52	0.52	1
01363	Endrin	72-20-8	0.072 U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.19 U	0.19	0.37	1
01363	Endrin Ketone	53494-70-5	0.072 U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.065 U	0.065	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037 U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8	1
01363	Mirex	2385-85-5	0.40 U	0.40	0.40	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.2	1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	12	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.8	1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.8	1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.8	1
10225	PCB-1254	11097-69-1	6.0	0.36	1.8	1
10225	PCB-1260	11096-82-5	5.7	0.36	1.8	1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.8	1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.8	1
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	16,900	5.36	21.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL181 SDG#: DE040-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
07914	Boron	7440-42-8	6.21	0.948	5.33	1
01650	Calcium	7440-70-2	3,150	6.53	21.3	1
01654	Iron	7439-89-6	20,000	5.02	21.3	1
01656	Lithium	7439-93-2	17.3	0.23	2.1	1
01657	Magnesium	7439-95-4	3,340	2.71	10.7	1
06958	Manganese	7439-96-5	327	0.0831	0.533	1
10145	Phosphorus	7723-14-0	258	0.597	10.7	1
01662	Potassium	7440-09-7	3,310	19.2	53.3	1
01667	Sodium	7440-23-5	102 J	39.7	107	1
07968	Strontium	7440-24-6	25.5	0.0661	0.533	1
06969	Tin	7440-31-5	2.56 J	1.07	10.7	1
06970	Titanium	7440-32-6	1,300	0.405	1.07	1
10146	Zirconium	7440-67-7	2.27 J	0.895	5.33	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.175 J	0.0627	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.38	0.0627	0.418	2
06126	Barium	7440-39-3	113	0.113	0.418	2
06127	Beryllium	7440-41-7	0.656	0.0167	0.105	2
06128	Cadmium	7440-43-9	0.242	0.0376	0.105	2
06131	Chromium	7440-47-3	24.0	0.125	0.418	2
06132	Cobalt	7440-48-4	6.23	0.0209	0.105	2
06133	Copper	7440-50-8	11.3	0.0690	0.418	2
06135	Lead	7439-92-1	12.8	0.0109	0.209	2
06138	Molybdenum	7439-98-7	0.733	0.0523	0.105	2
06139	Nickel	7440-02-0	15.1	0.105	0.418	2
06141	Selenium	7782-49-2	0.147 J	0.0418	0.418	2
06142	Silver	7440-22-4	0.0727 J	0.0125	0.105	2
06145	Thallium	7440-28-0	0.264	0.0314	0.105	2
06148	Vanadium	7440-62-2	40.9	0.0230	0.105	2
06149	Zinc	7440-66-6	58.8	0.585	3.14	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0128 J	0.0031	0.107	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.7	0.87	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.6	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.63 J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL181 SDG#: DE040-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	436	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.49	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	8.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 21:21	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 16:22	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 23:47	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 07:57	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 20:38	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL181 SDG#: DE040-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:49	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/31/2010 07:18	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:49	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:49	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:11	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 03:09	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 09:14	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 19:04	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL136 SDG#: DE040-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550	1
04688	Benidine	92-87-5	1,300	U 1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U 180	550	1
04688	Benzyl alcohol	100-51-6	180	U 180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U 18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180	1
04688	4-Chloroaniline	106-47-8	73	U 73	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	Diethylphthalate	84-66-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180	1
04688	Dimethylphthalate	131-11-3	18	U 18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550	1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	370	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	37	U 37	180	1
04688	4-Methylphenol	106-44-5	37	U 37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	37	U 37	180	1
04688	4-Nitroaniline	100-01-6	73	U 73	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL136 SDG#: DE040-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	18	U 18	180	1
04688	Pentachlorophenol	87-86-5	180	U 180	550	1
04688	Phenol	108-95-2	18	U 18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.1	5
10138	Acenaphthylene	208-96-8	1.8	U 1.8	9.1	5
10138	Anthracene	120-12-7	1.8	U 1.8	9.1	5
10138	Benzo(a)anthracene	56-55-3	6.4	J 3.7	9.1	5
10138	Benzo(a)pyrene	50-32-8	7.8	J 3.7	9.1	5
10138	Benzo(b)fluoranthene	205-99-2	13	3.7	9.1	5
10138	Benzo(g,h,i)perylene	191-24-2	6.8	J 3.7	9.1	5
10138	Benzo(k)fluoranthene	207-08-9	3.7	U 3.7	9.1	5
10138	Chrysene	218-01-9	13	1.8	9.1	5
10138	Dibenz(a,h)anthracene	53-70-3	3.7	U 3.7	9.1	5
10138	Fluoranthene	206-44-0	8.0	J 3.7	9.1	5
10138	Fluorene	86-73-7	3.7	U 3.7	9.1	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.7	U 3.7	9.1	5
10138	1-Methylnaphthalene	90-12-0	3.7	U 3.7	9.1	5
10138	2-Methylnaphthalene	91-57-6	3.7	U 3.7	9.1	5
10138	Naphthalene	91-20-3	24	3.7	9.1	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.1	5
10138	Phenanthrene	85-01-8	4.4	J 3.7	9.1	5
10138	Pyrene	129-00-0	7.5	J 3.7	9.1	5
Reporting limits were raised due to interference from the sample matrix.						
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U 1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U 4.8	9.9	1
10401	2,4-DB	94-82-6	0.68	U 0.68	1.9	1
10401	Dicamba	1918-00-9	0.44	U 0.44	1.3	1
10401	Dinoseb	88-85-7	0.88	U 0.88	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.88	U 0.88	1.9	1
10401	MCPA	94-74-6	150	U 150	270	1
10401	MCPP (Mecoprop)	93-65-2	110	J 82	270	1
10401	2,4,5-T	93-76-5	0.14	J 0.090	0.19	1
10401	2,4,5-TP	93-72-1	0.082	U 0.082	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL136 SDG#: DE040-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compound was affected: MCPA.						
Pesticides/PCBs						
	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.072 U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.066 U	0.066	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037 U	0.037	0.18	1
01363	Chlordane	57-74-9	2.1 U	2.1	3.7	1
01363	p,p-DDD	72-54-8	0.082 U	0.082	0.37	1
01363	p,p-DDE	72-55-9	0.072 U	0.072	0.37	1
01363	p,p-DDT	50-29-3	0.71 U	0.71	0.71	1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.18 U	0.18	0.37	1
01363	Endosulfan I	959-98-8	0.048 U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.072 U	0.072	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072 U	0.072	0.37	1
01363	Endrin	72-20-8	0.072 U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.30 U	0.30	0.37	1
01363	Endrin Ketone	53494-70-5	0.072 U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.066 U	0.066	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037 U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8	1
01363	Mirex	2385-85-5	0.53 U	0.53	0.53	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.2	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	7.7	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.55 U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.55 U	0.55	1.9	1
10225	PCB-1248	12672-29-6	9.9	0.36	1.9	1
10225	PCB-1254	11097-69-1	24	0.36	1.9	1
10225	PCB-1260	11096-82-5	12	0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9	1

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

*=This limit was used in the evaluation of the final result

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL136 SDG#: DE040-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,900	5.52	21.9	1
07914	Boron	7440-42-8	4.64 J	0.976	5.48	1
01650	Calcium	7440-70-2	4,040	6.72	21.9	1
01654	Iron	7439-89-6	21,400	5.16	21.9	1
01656	Lithium	7439-93-2	17.1	0.24	2.2	1
01657	Magnesium	7439-95-4	4,070	2.79	11.0	1
06958	Manganese	7439-96-5	216	0.0855	0.548	1
10145	Phosphorus	7723-14-0	791	0.614	11.0	1
01662	Potassium	7440-09-7	3,240	19.7	54.8	1
01667	Sodium	7440-23-5	209	40.9	110	1
07968	Strontium	7440-24-6	25.0	0.0680	0.548	1
06969	Tin	7440-31-5	2.25 J	1.10	11.0	1
06970	Titanium	7440-32-6	1,360	0.417	1.10	1
10146	Zirconium	7440-67-7	1.39 J	0.921	5.48	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.150 J	0.0639	0.213	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.75	0.0639	0.426	2
06126	Barium	7440-39-3	144	0.115	0.426	2
06127	Beryllium	7440-41-7	0.504	0.0170	0.106	2
06128	Cadmium	7440-43-9	0.351	0.0383	0.106	2
06131	Chromium	7440-47-3	25.0	0.128	0.426	2
06132	Cobalt	7440-48-4	5.60	0.0213	0.106	2
06133	Copper	7440-50-8	11.9	0.0703	0.426	2
06135	Lead	7439-92-1	44.6	0.0111	0.213	2
06138	Molybdenum	7439-98-7	0.477	0.0532	0.106	2
06139	Nickel	7440-02-0	14.5	0.106	0.426	2
06141	Selenium	7782-49-2	0.104 J	0.0426	0.426	2
06142	Silver	7440-22-4	1.06	0.0128	0.106	2
06145	Thallium	7440-28-0	0.241	0.0319	0.106	2
06148	Vanadium	7440-62-2	38.4	0.0234	0.106	2
06149	Zinc	7440-66-6	145	0.596	3.19	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0387 J	0.0031	0.108	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	0.88	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	32.9	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	2.4	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL136 SDG#: DE040-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	406	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.62	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	8.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 21:55	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 16:55	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	01/01/2011 00:15	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 08:11	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 20:56	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL136 SDG#: DE040-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/31/2010 07:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:15	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 03:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 09:38	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 19:20	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL203 SDG#: DE040-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	25	J 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	73	U 73	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	73	U 73	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	540	1
04688	Phenol	108-95-2	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL203 SDG#: DE040-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	260	0.73	1.8	1
10138	Acenaphthylene	208-96-8	2.3	0.36	1.8	1
10138	Anthracene	120-12-7	320	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	410	7.3	18	10
10138	Benzo(a)pyrene	50-32-8	360	7.3	18	10
10138	Benzo(b)fluoranthene	205-99-2	460	7.3	18	10
10138	Benzo(g,h,i)perylene	191-24-2	200	0.73	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	220	0.73	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	20	1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	20	1
10138	Chrysene	218-01-9	430	3.6	18	10
10138	Dibenz(a,h)anthracene	53-70-3	62	0.73	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U 6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5	U 6.5	20	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	14	J 6.5	20	1
10138	Fluoranthene	206-44-0	1,100	7.3	18	10
10138	Fluorene	86-73-7	190	0.73	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	200	0.73	1.8	1
10138	1-Methylnaphthalene	90-12-0	38	0.73	1.8	1
10138	2-Methylnaphthalene	91-57-6	48	0.73	1.8	1
10138	Naphthalene	91-20-3	50	0.73	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U 0.73	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5	U 6.5	20	1
10138	Phenanthrene	85-01-8	1,100	7.3	18	10
10138	Pyrene	129-00-0	1,000	7.3	18	10
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	3.7	J 1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U 4.8	9.8	1
10401	2,4-DB	94-82-6	0.68	U 0.68	1.9	1
10401	Dicamba	1918-00-9	0.47	J 0.44	1.3	1
10401	Dinoseb	88-85-7	0.87	U 0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	22	0.87	1.9	1
10401	MCPA	94-74-6	83	U 83	270	1
10401	MCPP (Mecoprop)	93-65-2	82	U 82	270	1
10401	2,4,5-T	93-76-5	0.089	U 0.089	0.19	1
10401	2,4,5-TP	93-72-1	0.082	U 0.082	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

The LCS recovery for 2,4-DP is outside the QC limits. Results from the reextraction are within the limits. 2,4-DP was detected in the in the original extracted sample at 20.21 ug/kg. The reextracted sample did not

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL203 SDG#: DE040-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
contain 2,4-DP. This is due to the homogeneity of the sample. The hold time had expired prior to the reextraction so all results are reported from the original extract.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.072 U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.056 U	0.056	0.18	1
01363	Beta BHC	319-85-7	0.65 U	0.65	1.8	10
01363	Gamma BHC - Lindane	58-89-9	0.059 U	0.059	0.18	1
01363	Chlordane	57-74-9	0.87 U	0.87	3.7	1
01363	p,p-DDD	72-54-8	1.0 U	1.0	1.0	1
01363	p,p-DDE	72-55-9	0.072 U	0.072	0.37	1
01363	p,p-DDT	50-29-3	1.1 U	1.1	1.1	1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.072 U	0.072	0.37	1
01363	Endosulfan I	959-98-8	0.048 U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.17 U	0.17	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072 U	0.072	0.37	1
01363	Endrin	72-20-8	0.072 U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	1.6 U	1.6	1.6	1
01363	Endrin Ketone	53494-70-5	0.17 U	0.17	0.37	1
01363	Heptachlor	76-44-8	0.21 U	0.21	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.070 U	0.070	0.18	1
01363	Methoxychlor	72-43-5	3.7 U	3.7	18	10
01363	Mirex	2385-85-5	2.2 U	2.2	2.2	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.2	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	2.9 J	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.9	1
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.9	1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9	1
10225	PCB-1254	11097-69-1	1.9	0.36	1.9	1
10225	PCB-1260	11096-82-5	2.5	0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL203 SDG#: DE040-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,000	5.22	20.7	1
07914	Boron	7440-42-8	6.14	0.923	5.19	1
01650	Calcium	7440-70-2	3,520	6.36	20.7	1
01654	Iron	7439-89-6	23,900	4.89	20.7	1
01656	Lithium	7439-93-2	21.6	0.23	2.1	1
01657	Magnesium	7439-95-4	4,420	2.64	10.4	1
06958	Manganese	7439-96-5	290	0.0809	0.519	1
10145	Phosphorus	7723-14-0	386	0.581	10.4	1
01662	Potassium	7440-09-7	3,940	18.7	51.9	1
01667	Sodium	7440-23-5	113	38.7	104	1
07968	Strontium	7440-24-6	25.0	0.0643	0.519	1
06969	Tin	7440-31-5	2.62 J	1.04	10.4	1
06970	Titanium	7440-32-6	1,330	0.394	1.04	1
10146	Zirconium	7440-67-7	1.46 J	0.871	5.19	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.134 J	0.0641	0.214	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	6.13	0.0641	0.427	2
06126	Barium	7440-39-3	101	0.115	0.427	2
06127	Beryllium	7440-41-7	0.663	0.0171	0.107	2
06128	Cadmium	7440-43-9	0.203	0.0384	0.107	2
06131	Chromium	7440-47-3	25.7	0.128	0.427	2
06132	Cobalt	7440-48-4	6.21	0.0214	0.107	2
06133	Copper	7440-50-8	11.6	0.0705	0.427	2
06135	Lead	7439-92-1	8.50	0.0111	0.214	2
06138	Molybdenum	7439-98-7	0.728	0.0534	0.107	2
06139	Nickel	7440-02-0	15.4	0.107	0.427	2
06141	Selenium	7782-49-2	0.112 J	0.0427	0.427	2
06142	Silver	7440-22-4	0.0325 J	0.0128	0.107	2
06145	Thallium	7440-28-0	0.264	0.0320	0.107	2
06148	Vanadium	7440-62-2	40.9	0.0235	0.107	2
06149	Zinc	7440-66-6	61.8	0.598	3.20	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0451 J	0.0030	0.104	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1	0.87	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.7	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.44 J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL203 SDG#: DE040-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	450	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.31	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	8.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 22:30	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 21:27	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/06/2011 10:26	Joseph M Gambler	10
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	01/01/2011 00:42	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 08:25	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 08:39	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 21:15	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL203 SDG#: DE040-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:16	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 03:37	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 10:02	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 19:36	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL257 SDG#: DE040-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700	1
04688	Benzo(a)anthracene	56-55-3	30	J 19	190	1
04688	Benzo(a)pyrene	50-32-8	26	J 19	190	1
04688	Benzo(b)fluoranthene	205-99-2	37	J 19	190	1
04688	Benzo(g,h,i)perylene	191-24-2	26	J 19	190	1
04688	Benzoic acid	65-85-0	190	U 190	560	1
04688	Benzyl alcohol	100-51-6	190	U 190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190	1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190	1
04688	4-Chloroaniline	106-47-8	74	U 74	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190	1
04688	Chrysene	218-01-9	51	J 19	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	Diethylphthalate	84-66-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190	1
04688	Dimethylphthalate	131-11-3	19	U 19	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560	1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	40	J 19	370	1
04688	Fluoranthene	206-44-0	50	J 19	190	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	74	U 74	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	37	U 37	190	1
04688	4-Methylphenol	106-44-5	37	U 37	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	37	U 37	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL257 SDG#: DE040-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	4-Nitroaniline	100-01-6	74	U 74	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U 19	190	1
04688	Pentachlorophenol	87-86-5	190	U 190	560	1
04688	Phenanthrene	85-01-8	51	J 19	190	1
04688	Phenol	108-95-2	19	U 19	190	1
04688	Pyrene	129-00-0	63	J 19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.3	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.3	5
10138	Anthracene	120-12-7	4.1	J 1.9	9.3	5
10138	Benzo(k)fluoranthene	207-08-9	15	3.7	9.3	5
10138	Dibenz(a,h)anthracene	53-70-3	11	3.7	9.3	5
10138	Fluorene	86-73-7	3.7	U 3.7	9.3	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	12	3.7	9.3	5
10138	1-Methylnaphthalene	90-12-0	23	3.7	9.3	5
10138	2-Methylnaphthalene	91-57-6	27	3.7	9.3	5
10138	Naphthalene	91-20-3	39	3.7	9.3	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.3	5
Reporting limits were raised due to interference from the sample matrix.						
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U 1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U 4.9	10	1
10401	2,4-DB	94-82-6	0.69	U 0.69	1.9	1
10401	Dicamba	1918-00-9	0.44	U 0.44	1.3	1
10401	Dinoseb	88-85-7	0.89	U 0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U 0.89	1.9	1
10401	MCPA	94-74-6	84	U 84	280	1
10401	MCPP (Mecoprop)	93-65-2	83	U 83	280	1
10401	2,4,5-T	93-76-5	0.091	U 0.091	0.19	1
10401	2,4,5-TP	93-72-1	0.083	U 0.083	0.19	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.073	U 0.073	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL257 SDG#: DE040-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8081A						
01363	Alpha BHC	319-84-6	0.056 J	0.038	0.18	1
01363	Beta BHC	319-85-7	0.25	0.067	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.14 U	0.14	0.18	1
01363	Chlordane	57-74-9	0.89 U	0.89	3.8	1
01363	p,p-DDD	72-54-8	2.3	0.073	0.38	1
01363	p,p-DDE	72-55-9	1.8 U	1.8	1.8	1
01363	p,p-DDT	50-29-3	1.4 U	1.4	1.4	1
01363	Delta BHC	319-86-8	0.040 U	0.040	0.18	1
01363	Dieldrin	60-57-1	0.30 U	0.30	0.38	1
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.073 U	0.073	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.073 U	0.073	0.38	1
01363	Endrin	72-20-8	0.073 U	0.073	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.64 U	0.64	0.64	1
01363	Endrin Ketone	53494-70-5	0.073 U	0.073	0.38	1
01363	Heptachlor	76-44-8	0.17 J	0.067	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.11 U	0.11	0.18	1
01363	Methoxychlor	72-43-5	0.38 U	0.38	1.8	1
01363	Mirex	2385-85-5	0.073 U	0.073	0.38	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.3	1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	3.0 J	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9	1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9	1
10225	PCB-1260	11096-82-5	0.67 J	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9	1
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	13,500	5.43	21.6	1
07914	Boron	7440-42-8	5.19 J	0.960	5.39	1
01650	Calcium	7440-70-2	2,640	6.61	21.6	1
01654	Iron	7439-89-6	20,000	5.08	21.6	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL257 SDG#: DE040-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	21.7	0.24	2.2	1
01657	Magnesium	7439-95-4	3,840	2.74	10.8	1
06958	Manganese	7439-96-5	255	0.0841	0.539	1
10145	Phosphorus	7723-14-0	317	0.604	10.8	1
01662	Potassium	7440-09-7	2,670	19.4	53.9	1
01667	Sodium	7440-23-5	89.8 J	40.2	108	1
07968	Strontium	7440-24-6	14.9	0.0669	0.539	1
06969	Tin	7440-31-5	3.01 J	1.08	10.8	1
06970	Titanium	7440-32-6	1,160	0.410	1.08	1
10146	Zirconium	7440-67-7	1.26 J	0.906	5.39	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.132 J	0.0654	0.218	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.80	0.0654	0.436	2
06126	Barium	7440-39-3	69.0	0.118	0.436	2
06127	Beryllium	7440-41-7	0.525	0.0174	0.109	2
06128	Cadmium	7440-43-9	0.179	0.0392	0.109	2
06131	Chromium	7440-47-3	19.3	0.131	0.436	2
06132	Cobalt	7440-48-4	5.17	0.0218	0.109	2
06133	Copper	7440-50-8	7.82	0.0719	0.436	2
06135	Lead	7439-92-1	16.9	0.0113	0.218	2
06138	Molybdenum	7439-98-7	0.572	0.0545	0.109	2
06139	Nickel	7440-02-0	11.8	0.109	0.436	2
06141	Selenium	7782-49-2	0.0807 J	0.0436	0.436	2
06142	Silver	7440-22-4	1.03	0.0131	0.109	2
06145	Thallium	7440-28-0	0.218	0.0327	0.109	2
06148	Vanadium	7440-62-2	33.8	0.0240	0.109	2
06149	Zinc	7440-66-6	81.0	0.610	3.27	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0062 J	0.0031	0.107	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6	0.89	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.3	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	450	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL257 SDG#: DE040-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.19	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	10.0	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 23:04	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 22:00	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	01/01/2011 02:05	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 08:53	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 21:33	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL257 SDG#: DE040-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:59	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:59	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:59	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:17	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 03:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 10:50	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 19:44	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL204 SDG#: DE040-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U 18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	Diethylphthalate	84-66-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	Dimethylphthalate	131-11-3	18	U 18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL204 SDG#: DE040-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	18	U 18	180	1
04688	Pentachlorophenol	87-86-5	180	U 180	540	1
04688	Phenol	108-95-2	18	U 18	180	1
04688	Pyrene	129-00-0	19	J 18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180	1
GC/MS	Semivolatiles SW-846 8270C SIM		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.6	U 3.6	8.9	5
10138	Acenaphthylene	208-96-8	1.8	U 1.8	8.9	5
10138	Anthracene	120-12-7	1.8	U 1.8	8.9	5
10138	Benzo(a)anthracene	56-55-3	3.6	U 3.6	8.9	5
10138	Benzo(a)pyrene	50-32-8	3.6	U 3.6	8.9	5
10138	Benzo(b)fluoranthene	205-99-2	4.9	J 3.6	8.9	5
10138	Benzo(g,h,i)perylene	191-24-2	3.6	U 3.6	8.9	5
10138	Benzo(k)fluoranthene	207-08-9	3.6	U 3.6	8.9	5
10138	Chrysene	218-01-9	4.2	J 1.8	8.9	5
10138	Dibenz(a,h)anthracene	53-70-3	3.6	U 3.6	8.9	5
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6,000	320	960	50
10138	Fluoranthene	206-44-0	8.2	J 3.6	8.9	5
10138	Fluorene	86-73-7	3.6	U 3.6	8.9	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.6	U 3.6	8.9	5
10138	1-Methylnaphthalene	90-12-0	3.6	U 3.6	8.9	5
10138	2-Methylnaphthalene	91-57-6	3.6	U 3.6	8.9	5
10138	Naphthalene	91-20-3	24	3.6	8.9	5
10138	N-Nitrosodimethylamine	62-75-9	3.6	U 3.6	8.9	5
10138	Phenanthrene	85-01-8	5.1	J 3.6	8.9	5
Reporting limits were raised due to interference from the sample matrix.						
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	26	U 26	77	20
10401	Dalapon	75-99-0	94	U 94	190	20
10401	2,4-DB	94-82-6	13	U 13	36	20
10401	Dicamba	1918-00-9	8.6	U 8.6	26	20
10401	Dinoseb	88-85-7	17	U 17	51	20
10401	2,4-DP (Dichlorprop)	120-36-5	17	U 17	36	20
10401	MCPA	94-74-6	1,600	U 1,600	5,400	20
10401	MCPP (Mecoprop)	93-65-2	1,600	U 1,600	5,400	20
10401	2,4,5-T	93-76-5	1.8	U 1.8	3.6	20
10401	2,4,5-TP	93-72-1	1.6	U 1.6	3.6	20

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL204 SDG#: DE040-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.35 U	0.35	0.89	5
01363	Alpha BHC	319-84-6	0.30 U	0.30	0.89	5
01363	Beta BHC	319-85-7	0.32 U	0.32	0.89	5
01363	Gamma BHC - Lindane	58-89-9	0.51 U	0.51	0.89	5
01363	Chlordane	57-74-9	4.3 U	4.3	18	5
01363	p,p-DDD	72-54-8	3.0 U	3.0	3.0	5
01363	p,p-DDE	72-55-9	0.38 U	0.38	1.8	5
01363	p,p-DDT	50-29-3	5.1 U	5.1	5.1	5
01363	Delta BHC	319-86-8	0.19 U	0.19	0.89	5
01363	Dieldrin	60-57-1	0.70 U	0.70	1.8	5
01363	Endosulfan I	959-98-8	0.24 U	0.24	0.89	5
01363	Endosulfan II	33213-65-9	0.35 U	0.35	1.8	5
01363	Endosulfan Sulfate	1031-07-8	1.4 U	1.4	7.3	20
01363	Endrin	72-20-8	0.35 U	0.35	1.8	5
01363	Endrin Aldehyde	7421-93-4	1.4 U	1.4	7.3	20
01363	Endrin Ketone	53494-70-5	1.4 U	1.4	7.3	20
01363	Heptachlor	76-44-8	0.32 U	0.32	0.89	5
01363	Heptachlor Epoxide	1024-57-3	0.18 U	0.18	0.89	5
01363	Methoxychlor	72-43-5	7.3 U	7.3	36	20
01363	Mirex	2385-85-5	2.3 U	2.3	7.3	20
01363	Toxaphene	8001-35-2	12 U	12	35	5

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	3.8	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56 U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8	1
10225	PCB-1248	12672-29-6	1.1 J	0.35	1.8	1
10225	PCB-1254	11097-69-1	2.3	0.35	1.8	1
10225	PCB-1260	11096-82-5	2.0	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,900	5.34	21.2	1
07914	Boron	7440-42-8	4.93 J	0.944	5.31	1
01650	Calcium	7440-70-2	3,330	6.51	21.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL204 SDG#: DE040-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	21,200	5.00	21.2	1
01656	Lithium	7439-93-2	20.0	0.23	2.1	1
01657	Magnesium	7439-95-4	3,900	2.70	10.6	1
06958	Manganese	7439-96-5	262	0.0828	0.531	1
10145	Phosphorus	7723-14-0	356	0.594	10.6	1
01662	Potassium	7440-09-7	2,590	19.1	53.1	1
01667	Sodium	7440-23-5	117	39.6	106	1
07968	Strontium	7440-24-6	24.4	0.0658	0.531	1
06969	Tin	7440-31-5	2.56 J	1.06	10.6	1
06970	Titanium	7440-32-6	1,200	0.403	1.06	1
10146	Zirconium	7440-67-7	3.02 J	0.891	5.31	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0824 J	0.0618	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.59	0.0618	0.412	2
06126	Barium	7440-39-3	90.9	0.111	0.412	2
06127	Beryllium	7440-41-7	0.534	0.0165	0.103	2
06128	Cadmium	7440-43-9	0.190	0.0371	0.103	2
06131	Chromium	7440-47-3	18.5	0.124	0.412	2
06132	Cobalt	7440-48-4	5.99	0.0206	0.103	2
06133	Copper	7440-50-8	8.06	0.0680	0.412	2
06135	Lead	7439-92-1	7.61	0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.652	0.0515	0.103	2
06139	Nickel	7440-02-0	11.7	0.103	0.412	2
06141	Selenium	7782-49-2	0.146 J	0.0412	0.412	2
06142	Silver	7440-22-4	0.0326 J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.211	0.0309	0.103	2
06148	Vanadium	7440-62-2	32.6	0.0227	0.103	2
06149	Zinc	7440-66-6	60.7	0.577	3.09	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0060 J	0.0028	0.0994	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0	0.86	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.2	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.28 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	459	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL204 SDG#: DE040-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.40	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 23:38	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 22:32	Gregory J Drahovsky	5
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/06/2011 10:58	Joseph M Gambler	50
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	01/10/2011 02:09	John W Perkins	20
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 09:21	Jamie L Brillhart	5
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/14/2011 21:44	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 21:52	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 01/24/2011 11:23

SL204 SDG#: DE040-19*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 14:02	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 14:02	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 14:02	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:18	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 04:34	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 11:14	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 12:36	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10354SLG026	Sample number(s): 6166074-6166080, 6166082-6166092								
Aniline	170	170.	500	ug/kg	58		10-107		
	U								
Anthracene	17	U	17.	170	ug/kg	97	76-112		
Benzydine	1,200	1,200.	3,300	ug/kg	43		15-121		
	U								
Benzo(a)anthracene	17	U	17.	170	ug/kg	97	73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	86	69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	83	61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	86	65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	85	67-125		
Benzoic acid	170	170.	500	ug/kg	85		10-154		
	U								
Benzyl alcohol	170	170.	500	ug/kg	87		68-111		
	U								
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	89	79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	97	75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	92	79-112		
Carbazole	17	U	17.	170	ug/kg	99	77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	92	74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	66	10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	98	70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	83	70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	90	68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	86	67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	93	72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	96	79-110		
Chrysene	17	U	17.	170	ug/kg	95	76-113		
Dibenzofuran	17	U	17.	170	ug/kg	99	79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	88	79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	89	70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	89	74-106		
3,3'-Dichlorobenzidine	100	100.	330	ug/kg	52		38-105		
	U								
2,4-Dichlorophenol	17	U	17.	170	ug/kg	92	75-111		
Diethylphthalate	17	U	17.	170	ug/kg	99	76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	96	72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	106	70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	99	77-109		
4,6-Dinitro-2-methylphenol	170	170.	500	ug/kg	83		53-110		
	U								
2,4-Dinitrophenol	670	670.	2,000	ug/kg	81		37-120		
	U								
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	104	73-115		
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	99	79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	99	77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	96	75-117		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	17 U	17.	170	ug/kg	98		78-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	94		78-116		
Hexachlorobutadiene	67 U	67.	170	ug/kg	97		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	105		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	90		68-105		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	87		64-119		
Isophorone	17 U	17.	170	ug/kg	92		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	94		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	89		76-105		
2-Methylphenol	33 U	33.	170	ug/kg	91		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	84		66-117		
2-Nitroaniline	17 U	17.	170	ug/kg	100		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	96		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	74		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	99		71-104		
2-Nitrophenol	17 U	17.	170	ug/kg	95		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	107		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	83		63-107		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	94		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	82		68-130		
Pentachlorophenol	170 U	170.	500	ug/kg	78		35-106		
Phenanthrene	17 U	17.	170	ug/kg	96		77-113		
Phenol	17 U	17.	170	ug/kg	92		58-112		
Pyrene	17 U	17.	170	ug/kg	98		75-115		
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	95		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	99		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	98		78-111		
Batch number: 10354SLJ026 Sample number(s): 6166074-6166080, 6166082-6166092									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	83		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	86		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	87		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	90		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	83		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	91		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	83		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	85		66-137		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	85		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	94		84-132		
Chrysene	0.33 U	0.33	1.7	ug/kg	85		79-120		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	81		62-142		
Diethylphthalate	6.0 U	6.0	18	ug/kg	78		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	86		70-130		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	96		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	92		78-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	91		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	82		62-141		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	88		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	79		62-120		
Naphthalene	0.67 U	0.67	1.7	ug/kg	84		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	92		39-148		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	85		55-176		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	85		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	86		56-121		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103610014A	Sample number(s): 6166074-6166080, 6166082-6166092								
2,4-D	1.2 U	1.2	3.6	ug/kg	105		40-140		
Dalapon	4.4 U	4.4	9.0	ug/kg	46		24-89		
2,4-DB	0.62 U	0.62	1.7	ug/kg	109		34-138		
Dicamba	0.40 U	0.40	1.2	ug/kg	94		20-164		
Dinoseb	0.80 U	0.80	2.4	ug/kg	7*		10-36		
2,4-DP (Dichlorprop)	0.80 U	0.80	1.7	ug/kg	157*		60-141		
MCPA	76 U	76.	250	ug/kg	91		34-113		
MCPP (Mecoprop)	75 U	75.	250	ug/kg	88		29-154		
2,4,5-T	0.082 U	0.082	0.17	ug/kg	110		33-145		
2,4,5-TP	0.075 U	0.075	0.17	ug/kg	92		48-138		
Batch number: 103500020A	Sample number(s): 6166077, 6166087								
6a Perchlorate EPA 6850	2.1 U	2.1	5.0	ug/kg	99		85-115		
Batch number: 103540020A	Sample number(s): 6166074-6166080, 6166082-6166092								
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	90	79	75-125	13	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	120		72-120		
PCB-1221	0.50 U	0.50	1.7	ug/kg					
PCB-1232	0.52 U	0.52	1.7	ug/kg					
PCB-1242	0.50 U	0.50	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.33 U	0.33	1.7	ug/kg	125		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 103550008A	Sample number(s): 6166074-6166080, 6166082-6166092								
Aldrin	0.066 U	0.066	0.17	ug/kg	55		44-135		
Alpha BHC	0.034 U	0.034	0.17	ug/kg	67		38-130		
Beta BHC	0.060 U	0.060	0.17	ug/kg	72		56-134		
Gamma BHC - Lindane	0.034 U	0.034	0.17	ug/kg	76		46-127		
Chlordane	0.80 U	0.80	3.4	ug/kg					
p,p-DDD	0.066 U	0.066	0.34	ug/kg	84		60-137		
p,p-DDE	0.066 U	0.066	0.34	ug/kg	71		59-141		
p,p-DDT	0.066 U	0.066	0.34	ug/kg	118		54-130		
Delta BHC	0.036 U	0.036	0.17	ug/kg	81		55-144		
Dieldrin	0.066 U	0.066	0.34	ug/kg	88		65-129		
Endosulfan I	0.044 U	0.044	0.17	ug/kg	85		45-123		
Endosulfan II	0.066 U	0.066	0.34	ug/kg	60*		63-127		
Endosulfan Sulfate	0.066 U	0.066	0.34	ug/kg	92		72-138		
Endrin	0.066 U	0.066	0.34	ug/kg	94		62-129		
Endrin Aldehyde	0.066 U	0.066	0.34	ug/kg	61		55-132		
Endrin Ketone	0.066 U	0.066	0.34	ug/kg	90		69-139		
Heptachlor	0.060 U	0.060	0.17	ug/kg	88		43-124		
Heptachlor Epoxide	0.034 U	0.034	0.17	ug/kg	68		65-131		
Methoxychlor	0.34 U	0.34	1.7	ug/kg	103		59-125		
Mirex	0.066 U	0.066	0.34	ug/kg					
Toxaphene	2.2 U	2.2	6.6	ug/kg					
Batch number: 103541026001A	Sample number(s): 6166074-6166080, 6166082-6166092								
Antimony	0.0583 U	0.0583	0.194	mg/kg	111		11-208		
Arsenic	0.0583 U	0.0583	0.388	mg/kg	99		80-120		
Beryllium	0.0155 U	0.0155	0.0971	mg/kg	106		82-118		
Cadmium	0.0350 U	0.0350	0.0971	mg/kg	102		82-118		
Chromium	0.117 U	0.117	0.388	mg/kg	111		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Cobalt	0.0194 U	0.0194	0.0971	mg/kg	102		82-118		
Copper	0.0641 U	0.0641	0.388	mg/kg	105		80-120		
Lead	0.0101 U	0.0101	0.194	mg/kg	102		80-120		
Nickel	0.0971 U	0.0971	0.388	mg/kg	106		80-120		
Silver	0.0117 U	0.0117	0.0971	mg/kg	103		66-134		
Thallium	0.0291 U	0.0291	0.0971	mg/kg	103		81-119		
Vanadium	0.0214 U	0.0214	0.0971	mg/kg	105		90-110		
Zinc	0.544 U	0.544	2.91	mg/kg	101		78-122		
Batch number: 103541026001B	Sample number(s): 6166074-6166080,6166082-6166092								
Selenium	0.0388 U	0.0388	0.388	mg/kg	107		79-122		
Batch number: 103541026001C	Sample number(s): 6166074-6166080,6166082-6166092								
Molybdenum	0.0485 U	0.0485	0.0971	mg/kg	109		78-122		
Batch number: 103541026001D	Sample number(s): 6166074-6166080,6166082-6166092								
Barium	0.105 U	0.105	0.388	mg/kg	105		79-121		
Batch number: 103545708001	Sample number(s): 6166074-6166080,6166082-6166092								
Aluminum	15.3 J	4.93	19.6	mg/kg	99		61-110		
Boron	0.873 U	0.873	4.90	mg/kg	95		78-110		
Calcium	13.6 J	6.01	19.6	mg/kg	93		88-110		
Iron	5.87 J	4.62	19.6	mg/kg	99		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	91		80-120		
Magnesium	2.49 U	2.49	9.80	mg/kg	90		82-110		
Manganese	0.0765 U	0.0765	0.490	mg/kg	101		81-119		
Phosphorus	2.33 J	0.549	9.80	mg/kg	94		80-120		
Potassium	17.6 U	17.6	49.0	mg/kg	100		78-110		
Sodium	36.6 U	36.6	98.0	mg/kg	99		87-110		
Strontium	0.0814 J	0.0608	0.490	mg/kg	96		79-121		
Tin	1.32 J	0.980	9.80	mg/kg	100		90-114		
Titanium	0.373 U	0.373	0.980	mg/kg	110		80-120		
Zirconium	0.824 U	0.824	4.90	mg/kg	95		80-120		
Batch number: 103545711001	Sample number(s): 6166074-6166080,6166082-6166092								
Mercury	0.0027 U	0.0027	0.0925	mg/kg	91		88-123		
Batch number: 11006006201A	Sample number(s): 6166074-6166080,6166082-6166084								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	91		85-115		
Batch number: 11006006201B	Sample number(s): 6166085-6166092								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	91		85-115		
Batch number: 11008008205A	Sample number(s): 6166074-6166080,6166082-6166084								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	105		90-110		
Batch number: 11008008205B	Sample number(s): 6166085-6166092								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	105		90-110		
Batch number: 11014243202A	Sample number(s): 6166074-6166080,6166082-6166092								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	95		80-120		
Batch number: 10351039402A	Sample number(s): 6166074-6166080,6166082-6166083								
22a pH by 9045C					100		95-105		
Batch number: 10351039402B	Sample number(s): 6166084-6166092								
22a pH by 9045C					100		95-105		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 10351182102A Oxidation Reduction Potential	Sample number(s):	6166074-6166080,6166082-6166083			100		98-102		
Batch number: 10351182102B Oxidation Reduction Potential	Sample number(s):	6166084-6166092			100		98-102		
Batch number: 10356162402A 28a Moisture Content by 160.3	Sample number(s):	6166074-6166079			100		80-120		
Batch number: 10356162402B 28a Moisture Content by 160.3	Sample number(s):	6166080,6166082-6166092			100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 10354SLG026	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074								
Aniline	0*	58	14-114	200*	30				
Anthracene	101	103	75-115	2	30				
Benizidine	0*	0*	35-141	0	30				
Benzo(a)anthracene	104	106	65-122	2	30				
Benzo(a)pyrene	86	94	57-126	8	30				
Benzo(b)fluoranthene	90	94	59-125	4	30				
Benzo(g,h,i)perylene	84	91	59-127	8	30				
Benzo(k)fluoranthene	85	92	56-132	8	30				
Benzoic acid	178*	175*	10-173	2	30				
Benzyl alcohol	94	101	55-123	7	30				
4-Bromophenyl-phenylether	101	103	67-129	1	30				
Butylbenzylphthalate	134	142*	73-134	6	30				
Di-n-butylphthalate	100	107	67-123	6	30				
Carbazole	98	105	64-120	7	30				
4-Chloro-3-methylphenol	98	104	53-130	7	30				
4-Chloroaniline	69	82	23-95	17	30				
bis(2-Chloroethoxy)methane	100	108	54-117	7	30				
bis(2-Chloroethyl)ether	107	100	60-116	6	30				
bis(2-Chloroisopropyl)ether	106	107	55-142	1	30				
2-Chloronaphthalene	84	96	50-141	13	30				
2-Chlorophenol	103	108	73-121	5	30				
4-Chlorophenyl-phenylether	95	99	64-119	4	30				
Chrysene	100	109	62-128	8	30				
Dibenzofuran	97	102	71-112	5	30				
1,2-Dichlorobenzene	97	100	66-108	3	30				
1,3-Dichlorobenzene	95	96	63-109	1	30				
1,4-Dichlorobenzene	95	100	53-113	5	30				
3,3'-Dichlorobenzidine	57	77	25-123	29	30				
2,4-Dichlorophenol	99	104	78-117	5	30				
Diethylphthalate	94	100	66-118	6	30				
2,4-Dimethylphenol	104	107	56-130	2	30				
3,5-Dimethylphenol	146*	150*	70-130	3	30				
Dimethylphthalate	95	103	64-118	8	30				
4,6-Dinitro-2-methylphenol	78	79	10-148	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2,4-Dinitrophenol	0*	0*	20-143	0	30				
2,4-Dinitrotoluene	79	83	57-114	5	30				
2,6-Dinitrotoluene	94	98	69-123	4	30				
1,2-Diphenylhydrazine	118	124	71-129	5	30				
bis(2-Ethylhexyl)phthalate	132*	138*	63-122	5	30				
Fluoranthene	90	94	59-122	4	30				
Hexachlorobenzene	97	102	61-111	5	30				
Hexachlorobutadiene	107	107	62-120	0	30				
Hexachlorocyclopentadiene	0*	0*	10-153	0	30				
Hexachloroethane	83	82	57-109	2	30				
Indeno(1,2,3-cd)pyrene	87	88	61-126	1	30				
Isophorone	99	105	51-118	6	30				
1-Methylnaphthalene	98	103	73-112	4	30				
2-Methylnaphthalene	97	96	76-114	1	30				
2-Methylphenol	93	98	47-142	5	30				
4-Methylphenol	99	100	55-126	1	30				
2-Nitroaniline	111	132*	67-125	17	30				
3-Nitroaniline	91	107	59-122	16	30				
4-Nitroaniline	95	110	52-112	15	30				
Nitrobenzene	102	106	51-114	4	30				
2-Nitrophenol	83	83	74-115	0	30				
4-Nitrophenol	90	101	39-133	11	30				
N-Nitroso-di-n-propylamine	99	105	60-116	6	30				
N-Nitrosodiphenylamine	108	114	86-145	5	30				
Di-n-octylphthalate	146*	158*	56-126	8	30				
Pentachlorophenol	82	83	17-149	2	30				
Phenanthrene	102	105	65-125	3	30				
Phenol	99	101	58-126	1	30				
Pyrene	119	128	51-151	7	30				
1,2,4-Trichlorobenzene	102	110	72-115	8	30				
2,4,5-Trichlorophenol	107	109	34-139	2	30				
2,4,6-Trichlorophenol	105	114	49-140	8	30				

Batch number: 10354SLJ026 Sample number(s): 6166074-6166080, 6166082-6166092 UNSPK: 6166074

Acenaphthene	127*	109*	63-105	15	30
Acenaphthylene	122	108	55-126	12	30
Anthracene	138*	115	46-136	18	30
Benzo(a)anthracene	206*	176*	39-144	16	30
Benzo(a)pyrene	132	116	34-156	13	30
Benzo(b)fluoranthene	188*	125	43-155	29	30
Benzo(g,h,i)perylene	47	57	33-141	8	30
Benzo(k)fluoranthene	125	108	42-144	15	30
Butylbenzylphthalate	0*	0*	73-140	0	30
Di-n-butylphthalate	0*	0*	78-160	0	30
Chrysene	316*	114	29-156	69*	30
Dibenz(a,h)anthracene	80	91	41-130	13	30
Diethylphthalate	0*	0*	87-131	0	30
Dimethylphthalate	0*	0*	74-118	0	30
Bis(2-Ethylhexyl)phthalate	0*	0*	39-167	0	30
Fluoranthene	924*	169*	26-166	125*	30
Fluorene	125*	121	45-121	3	30
Indeno(1,2,3-cd)pyrene	81	91	21-143	12	30
1-Methylnaphthalene	177*	145*	72-123	9	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Methylnaphthalene	136*	120	28-121	5	30				
Naphthalene	93 (2)	102 (2)	61-102	2	30				
N-Nitrosodimethylamine	90	92	48-113	2	30				
Di-n-octylphthalate	0*	0*	40-192	0	30				
Phenanthrene	515*	198*	12-165	47*	30				
Pyrene	668*	137	15-153	113*	30				
Batch number: 103610014A Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074									
2,4-D	82	88	28-161	7	35				
Dalapon	46	48	12-86	4	50				
2,4-DB	14*	22	20-170	8	50				
Dicamba	99	106	33-120	7	50				
Dinoseb	16	13	1-44	17	35				
2,4-DP (Dichlorprop)	82	121	55-141	38	50				
MCPA	114	92	31-184	18	50				
MCPP (Mecoprop)	52	43	16-174	19	50				
2,4,5-T	73	78	25-132	5	35				
2,4,5-TP	39	39	10-183	0	35				
Batch number: 103500020A Sample number(s): 6166077,6166087 UNSPK: P164948									
6a Perchlorate EPA 6850	100	100	80-120	0	20				
Batch number: 103540020A Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074									
PCB-1016	134	172*	29-146	25	50				
PCB-1260	121	94	39-149	25	50				
Batch number: 103550008A Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166075									
Aldrin	0*	0*	16-126	0	50				
Alpha BHC	0*	0*	10-129	0	50				
Beta BHC	0*	0*	14-147	0	50				
Gamma BHC - Lindane	0*	0*	10-140	0	50				
p,p-DDD	0*	0*	16-163	0	50				
p,p-DDE	-39337	-29706	18-161	53*	50				
	(2)	(2)							
p,p-DDT	-27483	-17011	10-176	39	50				
	(2)	(2)							
Delta BHC	0*	0*	23-140	0	50				
Dieldrin	583*	621*	19-154	6	50				
Endosulfan I	0*	0*	16-137	0	50				
Endosulfan II	0*	0*	28-154	0	50				
Endosulfan Sulfate	0*	398*	21-160	200*	50				
Endrin	0*	0*	11-149	0	50				
Endrin Aldehyde	0*	576*	10-148	200*	35				
Endrin Ketone	0*	0*	22-165	0	50				
Heptachlor	0*	0*	13-126	0	50				
Heptachlor Epoxide	0*	0*	13-157	0	50				
Methoxychlor	227*	0*	32-147	200*	50				
Batch number: 103541026001A Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166075 BKG: 6166075									
Antimony	48*	49*	75-125	3	20	0.131 J	0.0606 J	74* (1)	20
Arsenic	106	141*	75-125	14	20	2.62	2.80	6	20
Beryllium	99	96	75-125	2	20	0.326	0.358	9 (1)	20
Cadmium	95	99	75-125	5	20	0.130	0.123	5 (1)	20

*- Outside of specification

**.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chromium	143*	134*	75-125	3	20	13.1	21.8	50*	20
Cobalt	89	86	75-125	2	20	3.50	3.77	7	20
Copper	102	91	75-125	6	20	6.16	7.26	16	20
Lead	323*	91	75-125	44*	20	9.30	8.23	12	20
Nickel	110	112	75-125	1	20	10.8	14.4	28*	20
Silver	97	98	75-125	2	20	0.0569 J	0.0505 J	12 (1)	20
Thallium	92	86	75-125	4	20	0.137	0.133	3 (1)	20
Vanadium	147*	118	75-125	6	20	28.0	29.3	4	20
Zinc	536 (2)	104 (2)	75-125	36*	20	85.3	90.8	6	20
Batch number: 103541026001B Selenium	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166075 BKG: 6166075 93 92 75-125 0 20 0.117 J 0.106 J 10 (1) 20								
Batch number: 103541026001C Molybdenum	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166075 BKG: 6166075 96 98 75-125 3 20 0.391 0.494 23* (1) 20								
Batch number: 103541026001D Barium	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166075 BKG: 6166075 212 (2) 93 (2) 75-125 17 20 54.3 58.4 7 20								
Batch number: 103545708001 Aluminum	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074 BKG: 6166074 933 (2) 702 (2) 75-125 3 20 12,400 13,900 12 20								
Boron	98	98	84-115	1	20	6.17	6.01	3 (1)	20
Calcium	214 (2)	96 (2)	75-125	14	20	2,710	2,750	1	20
Iron	889 (2)	-1018 (2)	75-125	10	20	17,900	24,400	31*	20
Lithium	97	86	82-114	9	20	13.8	18.0	27*	20
Magnesium	199 (2)	-40 (2)	75-125	13	20	3,280	4,010	20	20
Manganese	193 (2)	80 (2)	75-125	21*	20	195	305	44*	20
Phosphorus	250*	57*	75-125	37*	20	354	432	20	20
Potassium	137*	117	75-125	5	20	2,240	2,370	6	20
Sodium	106	108	75-125	2	20	115	108	6 (1)	20
Strontium	84	84	75-115	1	20	23.7	17.4	31*	20
Tin	94	92	80-110	1	20	2.31 J	2.57 J	11 (1)	20
Titanium	239 (2)	141 (2)	75-125	7	20	1,070	1,120	5	20
Zirconium	98	90	75-125	7	20	2.09 J	2.51 J	18 (1)	20
Batch number: 103545711001 Mercury	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074 BKG: 6166074 101 101 65-135 3 20 0.0028 U 0.0029 J 200* (1) 20								
Batch number: 11006006201A 7a Perchlorate EPA 314.0	Sample number(s): 6166074-6166080,6166082-6166084 UNSPK: 6166074 BKG: 6166074 92 80-120 9.0 U 9.0 U 0 (1) 15								
Batch number: 11006006201B 7a Perchlorate EPA 314.0	Sample number(s): 6166085-6166092 UNSPK: 6166085 BKG: 6166085 82 80-120 9.0 U 9.0 U 0 (1) 15								
Batch number: 11008008205A 11a Anions by 300.0 - Fluoride	Sample number(s): 6166074-6166080,6166082-6166084 UNSPK: 6166074 BKG: 6166074 94 80-120 0.80 U 1.4 200* (1) 20								
Batch number: 11008008205B 11a Anions by 300.0 - Fluoride	Sample number(s): 6166085-6166092 UNSPK: 6166085 BKG: 6166085 100 80-120 1.2 2.0 51* (1) 20								
Batch number: 11014243202A 3a Cr VI by EPA 7199	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166092 BKG: 6166092 106 75-125 0.27 J 0.78 J 99* (1) 20								

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10351039402A 22a pH by 9045C	Sample number(s): 6166074-6166080, 6166082-6166083					BKG: 6166074 6.86	6.86	0	1
Batch number: 10351039402B 22a pH by 9045C	Sample number(s): 6166084-6166092					BKG: P166190 6.85	6.89	1	1
Batch number: 10351182102A Oxidation Reduction Potential	Sample number(s): 6166074-6166080, 6166082-6166083					BKG: 6166074 403	405	0	6
Batch number: 10351182102B Oxidation Reduction Potential	Sample number(s): 6166084-6166092					BKG: P166193 403	414	3	6
Batch number: 10356162402A 28a Moisture Content by 160.3	Sample number(s): 6166074-6166079					BKG: 6166079 5.1	5.2	2	20
Batch number: 10356162402B 28a Moisture Content by 160.3	Sample number(s): 6166080, 6166082-6166092					BKG: 6166080 9.9	9.5	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10354SLG026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6166074	97	96	90	86	95	96
6166075	95	90	83	80	94	94
6166076	93	92	95	85	94	94
6166077	94	93	93	84	94	88
6166078	89	86	92	80	89	88
6166079	93	91	93	79	91	90
6166080	90	88	96	80	92	92
6166082	95	93	97	82	94	95
6166083	93	93	93	83	93	87
6166084	92	87	95	81	93	93
6166085	89	88	83	80	87	87
6166086	90	88	90	83	91	94
6166087	91	89	95	85	96	91
6166088	88	86	91	79	91	93
6166089	88	88	84	80	89	85
6166090	91	87	90	81	93	95
6166091	93	90	98	86	99	92
6166092	91	88	95	84	96	96
Blank	83	85	87	79	93	84
LCS	90	91	103	91	93	85
MS	92	90	90	94	96	96
MSD	96	91	93	95	99	102

*- Outside of specification

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- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Surrogate Quality Control

Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10354SLJ026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6166074	111	88	84
6166075	120	88	92
6166076	92	84	82
6166077	79	65	59
6166078	90	83	69
6166079	90	81	84
6166080	90	81	84
6166082	90	85	86
6166083	88	81	78
6166084	88	80	81
6166085	90	81	79
6166086	85	74	88
6166087	81	79	73
6166088	87	82	87
6166089	65	61	61
6166090	87	81	83
6166091	88	74	68
6166092	83	78	75
Blank	89	79	88
LCS	100	69	83
MS	121	77	87
MSD	108	90	85

Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103540020A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6166074	80	140*
6166075	17*	21*
6166076	115	119
6166077	98	145*
6166078	161*	192*
6166079	76	106
6166080	105	119
6166082	106	94
6166083	138	188*
6166084	148*	143*
6166085	135	121*
6166086	89	81
6166087	101	93
6166088	125	117
6166089	100	84
6166090	130	95
6166091	114	100
6166092	90	92
Blank	128	133*
LCS	110	113
LCSD	105	120
MS	89	126*

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Surrogate Quality Control

MSD 73 99

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 103550008A

Tetrachloro-m-xylene Decachlorobiphenyl

6166074	56	76
6166075	73	0*
6166076	68	31
6166077	115	0*
6166078	65	159*
6166079	91	0*
6166080	61	217*
6166082	58	30
6166083	64	53
6166084	70	59
6166085	49*	84
6166086	63	0*
6166087	55	23
6166088	54	77
6166089	55	30
6166090	41*	0*
6166091	72	69
6166092	60	0*
Blank	61	110
LCS	51	50
MS	63	779*
MSD	63	0*

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 103610014A

2,4-Dichlorophenylacetic
acid

6166074	94
6166075	115
6166076	100
6166077	85
6166078	111
6166079	96
6166080	119
6166082	98
6166083	95
6166084	99
6166085	113
6166086	67
6166087	78
6166088	106
6166089	98
6166090	91
6166091	89
6166092	0*
Blank	79

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/24/11 at 11:23 AM

Group Number: 1225757

Surrogate Quality Control

LCS	92
MS	104
MSD	97

Limits: 36-156

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure hex and chrome
Signature: [Signature]
Sampler: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers
SL-303-SASB-SS-0.0-0.5	12.15.10	0940	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-262-SASB-SS-0.0-0.5MS	12.15.10	0925	soil	none	2 x 16 oz. jars & 2 6" sleeves
SL-302-SASB-SS-0.0-0.5	12.15.10	0949	soil	none	1 x 16 oz. jar & 1 6" sleeve
DUP06-SASB-QC-121510	12.15.10	0935	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-263-SASB-SS-0.0-0.5	12.15.10	0907	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-264-SASB-SS-0.0-0.5	12.15.10	0905	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-027-SASB-SB-4.0-5.0	12.15.10	1019	soil	none	3 x 4 oz. jars & 3 16 oz. jars
SL-027-SASB-SB-9.0-10.0	12.15.10	1025	soil	none	3 x 4 oz. jars & 3 16 oz. jars
SL-027-SASB-SB-4.5	12.15.10	1015	soil	none	5 Encore Samplers
SL-027-SASB-SB-8.5	12.15.10	1023	soil	none	5 Encore Samplers
TB-121510	12.15.10	0800	water	HCl	3-40 mL VOA vials
EB03-SASB-121510	12.15.10	1215	water	none	6-1 liter ambers
EB03-SASB-121510	12.15.10	1215	water	none	1-500 ml poly
EB03-SASB-121510	12.15.10	1215	water	HNO3	1-500 ml poly
EB15-SASB-121510	12.15.10	1230	water	none	5-1 liter ambers
EB15-SASB-121510	12.15.10	1230	water	none	1-500 ml poly
EB15-SASB-121510	12.15.10	1230	water	HNO3	1-500 ml poly
EB15-SASB-121510	12.15.10	1230	water	HCl	6-40 mL clear VOA vials
SL-132-SASB-SS-0.0-0.5	12.15.10	1105	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-133-SASB-SS-0.0-0.5	12.15.10	1055	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-131-SASB-SS-0.0-0.5	12.15.10	1125	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-135-SASB-SS-0.0-0.5	12.15.10	1113	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-134-SASB-SS-0.0-0.5	12.15.10	1055	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-298-SASB-SB-4.0-5.0	12.15.10	1425	soil	none	3 x 4 oz. jars & 3 16 oz. jars
SL-298-SASB-SB-9.0-10.0	12.15.10	1435	soil	none	3 x 4 oz. jars & 3 16 oz. jars
SL-298-SASB-SB-4.5	12.15.10	1420	soil	none	5 Encore Samplers
SL-298-SASB-SB-9.5	12.15.10	1430	soil	none	5 Encore Samplers
SED-021-SIV-SD-0.0-0.5	12.15.10	0921	soil	none	1 x 16 oz. jar & 1 6" sleeve
SED-018-SIV-SD-0.0-0.5	12.15.10	1231	soil	none	1 x 16 oz. jar & 1 6" sleeve
SED-080-SIV-SD-0.0-0.5	12.15.10	1153	soil	none	1 x 16 oz. jar & 1 6" sleeve
SED-016-SIV-SD-0.0-0.5	12.15.10	1341	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-153-SASB-SS-0.0-0.5	12.15.10	1408	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-155-SASB-SS-0.0-0.5	12.15.10	1341	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-149-SASB-SS-0.0-0.5	12.15.10	1550	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-156-SASB-SS-0.0-0.5	12.15.10	1332	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-150-SASB-SS-0.0-0.5	12.15.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-181-SASB-SS-0.0-0.5	12.15.10	1526	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-136-SASB-SS-0.0-0.5	12.15.10	1350	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-203-SASB-SS-0.0-0.5	12.15.10	1500	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-257-SASB-SS-0.0-0.5	12.15.10	1325	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-204-SASB-SS-0.0-0.5	12.15.10	1551	soil	none	1 x 16 oz. jar & 1 6" sleeve
SL-297-SASB-4.0-5.0	12.15.10	1600	soil	none	3 4 oz. jars & 3 16 oz. jars
SL-297-SASB-7.0-8.0	12.15.10	1606	soil	none	3 4 oz. jars & 3 16 oz. jars
SL-297-SASB-4.5	12.15.10	1558	soil	none	5 Encore Samplers
SL-297-SASB-7.5	12.15.10	1603	soil	none	5 Encore Samplers

VOIDED

Other Instructions and Notes

Received by: (Signature)
Date/Time: 12.15.10 1700
Received by: (Signature)

Received for Laboratory by: (Signature)
Date/Time: 12/15/10 1000
APR 16 00732952

Laboratory:
Lancaster Laboratories, Inc.
No. of coolers = 6

SED-019-SIV-SD-0.0-0.5 was voided on 12/16/10 per PB.

NLM 12/30/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/16/2010

Group Number: 1225765

SDG: DX024

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample DescriptionLancaster Labs (LLI) #

SL-132-SA5B-SS-0.0-0.5 Grab Soil	6166113
SL-133-SA5B-SS-0.0-0.5 Grab Soil	6166114
SL-131-SA5B-SS-0.0-0.5 Grab Soil	6166115
SL-135-SA5B-SS-0.0-0.5 Grab Soil	6166116
SL-134-SA5B-SS-0.0-0.5 Grab Soil	6166117
SED-021-SIV-SD-0.0-0.5 Grab Soil	6166118
SED-018-SIV-SD-0.0-0.5 Grab Soil	6166119
SED-016-SIV-SD-0.0-0.5 Grab Soil	6166121
SL-153-SA5B-SS-0.0-0.5 Grab Soil	6166122
SL-155-SA5B-SS-0.0-0.5 Grab Soil	6166123
SL-149-SA5B-SS-0.0-0.5 Grab Soil	6166124
SL-156-SA5B-SS-0.0-0.5 Grab Soil	6166125
SL-150-SA5B-SS-0.0-0.5 Grab Soil	6166126
SL-181-SA5B-SS-0.0-0.5 Grab Soil	6166127
SL-136-SA5B-SS-0.0-0.5 Grab Soil	6166128
SL-203-SA5B-SS-0.0-0.5 Grab Soil	6166129
SL-257-SA5B-SS-0.0-0.5 Grab Soil	6166130
SL-204-SA5B-SS-0.0-0.5 Grab Soil	6166131

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program

Attn: Todd Burgess

COPY TO
1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Charles J. Neslund
Manager



Analysis Report

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Page 1 of 4

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166113
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-132 SDG#: DX024-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166113
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-132 SDG#: DX024-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0517 JQ	0.0185	1.13	1
11031	12378-PeCDD	40321-76-4	0.325 JQ	0.0500	5.63	1
11031	123478-HxCDD	39227-28-6	0.574 JB	0.0409	5.63	1
11031	123678-HxCDD	57653-85-7	1.04 JBQ	0.0412	5.63	1
11031	123789-HxCDD	19408-74-3	0.775 JB	0.0358	5.63	1
11031	1234678-HpCDD	35822-46-9	23.9 B	0.0765	5.63	1
11031	OCDD	3268-87-9	234 B	0.0778	11.3	1
11031	2378-TCDF	51207-31-9	1.02 JB	0.0666	1.13	1
11031	12378-PeCDF	57117-41-6	0.337 JB	0.0609	5.63	1
11031	23478-PeCDF	57117-31-4	0.851 JB	0.0586	5.63	1
11031	123478-HxCDF	70648-26-9	0.469 JB	0.0358	5.63	1
11031	123678-HxCDF	57117-44-9	0.289 JBQ	0.0346	5.63	1
11031	123789-HxCDF	72918-21-9	0.180 JBQ	0.0318	5.63	1
11031	234678-HxCDF	60851-34-5	0.343 JB	0.0319	5.63	1
11031	1234678-HpCDF	67562-39-4	3.59 JB	0.0364	5.63	1
11031	1234789-HpCDF	55673-89-7	0.285 JB	0.0456	5.63	1
11031	OCDF	39001-02-0	11.4 B	0.0537	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	54	32 - 141
13C12-123678-HxCDD	54	28 - 130
13C12-123789-HxCDD	62	28 - 130
13C12-1234678-HpCDD	51	23 - 140
13C12-OCDD	42	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	62	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	57	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	53	28 - 143
13C12-1234789-HpCDF	50	26 - 138
13C12-OCDF	35	17 - 157
13C12-1278-TCDD (CRS)	57	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166113
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-132 SDG#: DX024-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166113
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/16/2010 10:00

Suite 210

Reported: 02/01/2011 23:46

Chantilly VA 20151

D-132 SDG#: DX024-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 09:54	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166114
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-133 SDG#: DX024-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166114
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-133 SDG#: DX024-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.161 J	0.0282	1.07	1
11031	12378-PeCDD	40321-76-4	0.501 J	0.0472	5.36	1
11031	123478-HxCDD	39227-28-6	0.654 JB	0.0491	5.36	1
11031	123678-HxCDD	57653-85-7	1.27 JB	0.0542	5.36	1
11031	123789-HxCDD	19408-74-3	1.12 JB	0.0560	5.36	1
11031	1234678-HpCDD	35822-46-9	31.8 B	0.0843	5.36	1
11031	OCDD	3268-87-9	347 B	0.141	10.7	1
11031	2378-TCDF	51207-31-9	0.610 JB	0.0529	1.07	1
11031	12378-PeCDF	57117-41-6	0.182 JBQ	0.0458	5.36	1
11031	23478-PeCDF	57117-31-4	0.875 JB	0.0441	5.36	1
11031	123478-HxCDF	70648-26-9	0.438 JBQ	0.0380	5.36	1
11031	123678-HxCDF	57117-44-9	0.351 JB	0.0335	5.36	1
11031	123789-HxCDF	72918-21-9	0.233 JB	0.0492	5.36	1
11031	234678-HxCDF	60851-34-5	0.536 JB	0.0385	5.36	1
11031	1234678-HpCDF	67562-39-4	5.61 B	0.0569	5.36	1
11031	1234789-HpCDF	55673-89-7	0.593 JB	0.0779	5.36	1
11031	OCDF	39001-02-0	18.6 B	0.167	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	44	23 - 140
13C12-OCDD	23	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	91	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	52	28 - 143
13C12-1234789-HpCDF	44	26 - 138
13C12-OCDF	18	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166114
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-133 SDG#: DX024-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166114
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/16/2010 10:00

Suite 210

Reported: 02/01/2011 23:46

Chantilly VA 20151

D-133 SDG#: DX024-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 08:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166115
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-131 SDG#: DX024-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166115
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-131 SDG#: DX024-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0653	JQ 0.0590	1.05	1
11031	12378-PeCDD	40321-76-4	0.537	JQ 0.0970	5.25	1
11031	123478-HxCDD	39227-28-6	0.966	JB 0.0958	5.25	1
11031	123678-HxCDD	57653-85-7	3.99	JB 0.0976	5.25	1
11031	123789-HxCDD	19408-74-3	2.38	JB 0.101	5.25	1
11031	1234678-HpCDD	35822-46-9	196	B 0.179	5.25	1
11031	OCDD	3268-87-9	3,130	B 0.298	10.5	1
11031	2378-TCDF	51207-31-9	0.209	JB 0.0565	1.05	1
11031	12378-PeCDF	57117-41-6	0.491	JB 0.0455	5.25	1
11031	23478-PeCDF	57117-31-4	0.730	JB 0.0430	5.25	1
11031	123478-HxCDF	70648-26-9	0.866	JB 0.0602	5.25	1
11031	123678-HxCDF	57117-44-9	0.815	JB 0.0570	5.25	1
11031	123789-HxCDF	72918-21-9	0.498	JB 0.0653	5.25	1
11031	234678-HxCDF	60851-34-5	0.893	JB 0.0574	5.25	1
11031	1234678-HpCDF	67562-39-4	11.1	B 0.0748	5.25	1
11031	1234789-HpCDF	55673-89-7	1.05	JB 0.0975	5.25	1
11031	OCDF	39001-02-0	27.9	B 0.172	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	55	23 - 140
13C12-OCDD	39	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	42	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166115
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-131 SDG#: DX024-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166115
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/16/2010 10:00

Suite 210

Reported: 02/01/2011 23:46

Chantilly VA 20151

D-131 SDG#: DX024-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 11:47	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1



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Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166116
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-135 SDG#: DX024-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166116
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-135 SDG#: DX024-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.801	J 0.0541	1.11	1
11031	12378-PeCDD	40321-76-4	5.35	JQ 0.0884	5.56	1
11031	123478-HxCDD	39227-28-6	9.76	B 0.0659	5.56	1
11031	123678-HxCDD	57653-85-7	20.3	B 0.0699	5.56	1
11031	123789-HxCDD	19408-74-3	18.7	B 0.0690	5.56	1
11031	1234678-HpCDD	35822-46-9	555	B 0.248	5.56	1
11031	OCDD	3268-87-9	5,210	EB 0.209	11.1	1
11031	2378-TCDF	51207-31-9	0.896	JBQ 0.0782	1.11	1
11031	12378-PeCDF	57117-41-6	1.38	JB 0.0392	5.56	1
11031	23478-PeCDF	57117-31-4	1.74	JB 0.0354	5.56	1
11031	123478-HxCDF	70648-26-9	4.87	JB 0.0568	5.56	1
11031	123678-HxCDF	57117-44-9	4.26	JB 0.0537	5.56	1
11031	123789-HxCDF	72918-21-9	1.52	JB 0.0743	5.56	1
11031	234678-HxCDF	60851-34-5	5.26	JB 0.0554	5.56	1
11031	1234678-HpCDF	67562-39-4	106	B 0.0568	5.56	1
11031	1234789-HpCDF	55673-89-7	7.92	B 0.104	5.56	1
11031	OCDF	39001-02-0	296	B 0.129	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	51	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	39	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166116
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-135 SDG#: DX024-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					



Analysis Report

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Page 4 of 4

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166116
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-135 SDG#: DX024-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 12:43	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166117
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-134 SDG#: DX024-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166117
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-134 SDG#: DX024-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.857 J	0.0557	1.05	1
11031	12378-PeCDD	40321-76-4	1.40 JQ	0.0638	5.26	1
11031	123478-HxCDD	39227-28-6	0.844 JB	0.0400	5.26	1
11031	123678-HxCDD	57653-85-7	2.10 JB	0.0408	5.26	1
11031	123789-HxCDD	19408-74-3	2.00 JB	0.0428	5.26	1
11031	1234678-HpCDD	35822-46-9	51.8 B	0.0742	5.26	1
11031	OCDD	3268-87-9	530 B	0.108	10.5	1
11031	2378-TCDF	51207-31-9	0.297 JB	0.0427	1.05	1
11031	12378-PeCDF	57117-41-6	0.359 JB	0.0229	5.26	1
11031	23478-PeCDF	57117-31-4	0.510 JB	0.0196	5.26	1
11031	123478-HxCDF	70648-26-9	0.547 JB	0.0277	5.26	1
11031	123678-HxCDF	57117-44-9	0.441 JB	0.0264	5.26	1
11031	123789-HxCDF	72918-21-9	0.184 JB	0.0322	5.26	1
11031	234678-HxCDF	60851-34-5	0.551 JB	0.0267	5.26	1
11031	1234678-HpCDF	67562-39-4	8.16 B	0.0351	5.26	1
11031	1234789-HpCDF	55673-89-7	0.685 JB	0.0493	5.26	1
11031	OCDF	39001-02-0	21.4 B	0.0538	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	50	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	47	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166117
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-134 SDG#: DX024-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166117
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

CDM Federal Programs Corp.

Submitted: 12/16/2010 10:00

14420 Albemarle Point Place

Reported: 02/01/2011 23:46

Suite 210

Chantilly VA 20151

D-134 SDG#: DX024-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 13:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166118
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-021 SDG#: DX024-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166118
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-021 SDG#: DX024-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0453 JQ	0.0253	1.05	1
11031	12378-PeCDD	40321-76-4	0.170 JQ	0.0409	5.27	1
11031	123478-HxCDD	39227-28-6	0.391 JBQ	0.0338	5.27	1
11031	123678-HxCDD	57653-85-7	2.24 JB	0.0351	5.27	1
11031	123789-HxCDD	19408-74-3	0.745 JB	0.0356	5.27	1
11031	1234678-HpCDD	35822-46-9	54.5 B	0.0612	5.27	1
11031	OCDD	3268-87-9	565 B	0.0753	10.5	1
11031	2378-TCDF	51207-31-9	0.0483 JB	0.0267	1.05	1
11031	12378-PeCDF	57117-41-6	0.192 JBQ	0.0148	5.27	1
11031	23478-PeCDF	57117-31-4	0.165 JBQ	0.0158	5.27	1
11031	123478-HxCDF	70648-26-9	0.324 JB	0.0297	5.27	1
11031	123678-HxCDF	57117-44-9	0.343 JB	0.0248	5.27	1
11031	123789-HxCDF	72918-21-9	0.0774 JBQ	0.0387	5.27	1
11031	234678-HxCDF	60851-34-5	0.513 JB	0.0278	5.27	1
11031	1234678-HpCDF	67562-39-4	9.15 B	0.0222	5.27	1
11031	1234789-HpCDF	55673-89-7	0.816 JB	0.0403	5.27	1
11031	OCDF	39001-02-0	21.0 B	0.0573	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	92	25 - 181
13C12-123478-HxCDD	93	32 - 141
13C12-123678-HxCDD	92	28 - 130
13C12-123789-HxCDD	93	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	85	24 - 169
13C12-12378-PeCDF	103	24 - 185
13C12-23478-PeCDF	91	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	100	26 - 123
13C12-234678-HxCDF	91	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	110	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	90	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166118
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-021 SDG#: DX024-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166118
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/16/2010 10:00

Suite 210

Reported: 02/01/2011 23:46

Chantilly VA 20151

D-021 SDG#: DX024-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 14:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166119
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-018 SDG#: DX024-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166119
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-018 SDG#: DX024-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0408 JQ	0.0180	1.11	1
11031	12378-PeCDD	40321-76-4	0.190 JQ	0.0296	5.55	1
11031	123478-HxCDD	39227-28-6	0.202 JBQ	0.0272	5.55	1
11031	123678-HxCDD	57653-85-7	0.619 JB	0.0290	5.55	1
11031	123789-HxCDD	19408-74-3	0.458 JBQ	0.0290	5.55	1
11031	1234678-HpCDD	35822-46-9	16.4 B	0.0518	5.55	1
11031	OCDD	3268-87-9	191 B	0.0605	11.1	1
11031	2378-TCDF	51207-31-9	0.128 JBQ	0.0342	1.11	1
11031	12378-PeCDF	57117-41-6	0.260 JB	0.0144	5.55	1
11031	23478-PeCDF	57117-31-4	0.461 JB	0.0156	5.55	1
11031	123478-HxCDF	70648-26-9	0.178 JB	0.0200	5.55	1
11031	123678-HxCDF	57117-44-9	0.196 JBQ	0.0169	5.55	1
11031	123789-HxCDF	72918-21-9	0.159 JBQ	0.0270	5.55	1
11031	234678-HxCDF	60851-34-5	0.249 JB	0.0191	5.55	1
11031	1234678-HpCDF	67562-39-4	2.93 JB	0.0183	5.55	1
11031	1234789-HpCDF	55673-89-7	0.205 JB	0.0358	5.55	1
11031	OCDF	39001-02-0	8.78 JB	0.0404	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	96	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	103	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166119
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-018 SDG#: DX024-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166119
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/16/2010 10:00

Suite 210

Reported: 02/01/2011 23:46

Chantilly VA 20151

D-018 SDG#: DX024-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 15:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166121
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-016 SDG#: DX024-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166121
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-016 SDG#: DX024-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.120	JQ 0.0287	1.12	1
11031	12378-PeCDD	40321-76-4	0.820	JQ 0.0609	5.58	1
11031	123478-HxCDD	39227-28-6	2.18	JB 0.0487	5.58	1
11031	123678-HxCDD	57653-85-7	20.7	B 0.0510	5.58	1
11031	123789-HxCDD	19408-74-3	5.06	JB 0.0494	5.58	1
11031	1234678-HpCDD	35822-46-9	735	B 0.202	5.58	1
11031	OCDD	3268-87-9	7,800	EB 0.194	11.2	1
11031	2378-TCDF	51207-31-9	0.0902	JBQ 0.0305	1.12	1
11031	12378-PeCDF	57117-41-6	0.363	JBQ 0.0208	5.58	1
11031	23478-PeCDF	57117-31-4	0.247	JBQ 0.0225	5.58	1
11031	123478-HxCDF	70648-26-9	2.42	JB 0.0539	5.58	1
11031	123678-HxCDF	57117-44-9	2.82	JB 0.0451	5.58	1
11031	123789-HxCDF	72918-21-9	0.495	JBQ 0.0674	5.58	1
11031	234678-HxCDF	60851-34-5	4.66	JB 0.0528	5.58	1
11031	1234678-HpCDF	67562-39-4	75.4	B 0.0434	5.58	1
11031	1234789-HpCDF	55673-89-7	11.7	B 0.0828	5.58	1
11031	OCDF	39001-02-0	177	B 0.0675	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	65	23 - 140
13C12-OCDD	57	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	43	17 - 157
13C12-1278-TCDD (CRS)	68	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166121
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-016 SDG#: DX024-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166121
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/16/2010 10:00

Suite 210

Reported: 02/01/2011 23:46

Chantilly VA 20151

D-016 SDG#: DX024-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 16:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166122
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-153 SDG#: DX024-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166122
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-153 SDG#: DX024-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.161	JQ	0.0212	1
11031	12378-PeCDD	40321-76-4	1.14	J	0.0453	1
11031	123478-HxCDD	39227-28-6	2.53	JB	0.0281	1
11031	123678-HxCDD	57653-85-7	6.16	B	0.0295	1
11031	123789-HxCDD	19408-74-3	5.44	JB	0.0291	1
11031	1234678-HpCDD	35822-46-9	165	B	0.0942	1
11031	OCDD	3268-87-9	2,010	B	0.106	1
11031	2378-TCDF	51207-31-9	0.461	JB	0.0440	1
11031	12378-PeCDF	57117-41-6	0.628	JB	0.0189	1
11031	23478-PeCDF	57117-31-4	0.920	JB	0.0179	1
11031	123478-HxCDF	70648-26-9	1.47	JB	0.0273	1
11031	123678-HxCDF	57117-44-9	1.38	JB	0.0259	1
11031	123789-HxCDF	72918-21-9	0.874	JB	0.0302	1
11031	234678-HxCDF	60851-34-5	1.83	JB	0.0266	1
11031	1234678-HpCDF	67562-39-4	29.0	B	0.0406	1
11031	1234789-HpCDF	55673-89-7	2.02	JB	0.0501	1
11031	OCDF	39001-02-0	67.9	B	0.0309	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166122
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-153 SDG#: DX024-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166122
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/16/2010 10:00

Suite 210

Reported: 02/01/2011 23:46

Chantilly VA 20151

D-153 SDG#: DX024-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 17:26	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166123
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-155 SDG#: DX024-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166123
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-155 SDG#: DX024-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0159 U	0.0159	1.04	1
11031	12378-PeCDD	40321-76-4	0.0276 U	0.0276	5.22	1
11031	123478-HxCDD	39227-28-6	0.182 JBQ	0.0239	5.22	1
11031	123678-HxCDD	57653-85-7	1.24 JB	0.0245	5.22	1
11031	123789-HxCDD	19408-74-3	1.22 JB	0.0247	5.22	1
11031	1234678-HpCDD	35822-46-9	25.2 B	0.0416	5.22	1
11031	OCDD	3268-87-9	313 B	0.0505	10.4	1
11031	2378-TCDF	51207-31-9	0.137 JBQ	0.0253	1.04	1
11031	12378-PeCDF	57117-41-6	0.298 JB	0.0117	5.22	1
11031	23478-PeCDF	57117-31-4	0.275 JB	0.0123	5.22	1
11031	123478-HxCDF	70648-26-9	0.202 JB	0.0182	5.22	1
11031	123678-HxCDF	57117-44-9	0.234 JBQ	0.0159	5.22	1
11031	123789-HxCDF	72918-21-9	0.391 JB	0.0249	5.22	1
11031	234678-HxCDF	60851-34-5	0.262 JBQ	0.0182	5.22	1
11031	1234678-HpCDF	67562-39-4	2.35 JB	0.0169	5.22	1
11031	1234789-HpCDF	55673-89-7	0.222 JBQ	0.0307	5.22	1
11031	OCDF	39001-02-0	4.59 JB	0.0307	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	52	17 - 157
13C12-1278-TCDD (CRS)	74	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166123
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-155 SDG#: DX024-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166123
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-155 SDG#: DX024-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 18:23	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166124
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-149 SDG#: DX024-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166124
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-149 SDG#: DX024-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0659 J	0.0201	1.04	1
11031	12378-PeCDD	40321-76-4	0.461 J	0.0416	5.22	1
11031	123478-HxCDD	39227-28-6	0.921 JB	0.0276	5.22	1
11031	123678-HxCDD	57653-85-7	2.52 JB	0.0283	5.22	1
11031	123789-HxCDD	19408-74-3	2.03 JB	0.0285	5.22	1
11031	1234678-HpCDD	35822-46-9	68.7 B	0.0693	5.22	1
11031	OCDD	3268-87-9	737 B	0.0858	10.4	1
11031	2378-TCDF	51207-31-9	0.282 JB	0.0410	1.04	1
11031	12378-PeCDF	57117-41-6	0.869 JB	0.0192	5.22	1
11031	23478-PeCDF	57117-31-4	0.589 JB	0.0176	5.22	1
11031	123478-HxCDF	70648-26-9	0.752 JB	0.0233	5.22	1
11031	123678-HxCDF	57117-44-9	0.861 JB	0.0221	5.22	1
11031	123789-HxCDF	72918-21-9	0.281 JB	0.0259	5.22	1
11031	234678-HxCDF	60851-34-5	0.883 JB	0.0227	5.22	1
11031	1234678-HpCDF	67562-39-4	15.7 B	0.0308	5.22	1
11031	1234789-HpCDF	55673-89-7	1.16 JB	0.0384	5.22	1
11031	OCDF	39001-02-0	39.9 B	0.0362	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	51	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	54	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166124
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-149 SDG#: DX024-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166124
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/16/2010 10:00

Suite 210

Reported: 02/01/2011 23:46

Chantilly VA 20151

D-149 SDG#: DX024-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 22:22	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166125
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-156 SDG#: DX024-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166125
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-156 SDG#: DX024-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.139	J 0.0258	1.07	1
11031	12378-PeCDD	40321-76-4	1.43	J 0.0652	5.37	1
11031	123478-HxCDD	39227-28-6	2.84	JB 0.0410	5.37	1
11031	123678-HxCDD	57653-85-7	7.38	B 0.0425	5.37	1
11031	123789-HxCDD	19408-74-3	5.11	JB 0.0429	5.37	1
11031	1234678-HpCDD	35822-46-9	183	B 0.117	5.37	1
11031	OCDD	3268-87-9	1,910	B 0.120	10.7	1
11031	2378-TCDF	51207-31-9	0.573	JB 0.0707	1.07	1
11031	12378-PeCDF	57117-41-6	0.693	JB 0.0260	5.37	1
11031	23478-PeCDF	57117-31-4	1.51	JB 0.0253	5.37	1
11031	123478-HxCDF	70648-26-9	1.85	JB 0.0364	5.37	1
11031	123678-HxCDF	57117-44-9	2.20	JB 0.0331	5.37	1
11031	123789-HxCDF	72918-21-9	0.686	JB 0.0454	5.37	1
11031	234678-HxCDF	60851-34-5	2.25	JB 0.0352	5.37	1
11031	1234678-HpCDF	67562-39-4	20.1	B 0.0287	5.37	1
11031	1234789-HpCDF	55673-89-7	2.99	JB 0.0456	5.37	1
11031	OCDF	39001-02-0	34.6	B 0.0524	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166125
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-156 SDG#: DX024-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166125
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-156 SDG#: DX024-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 23:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166126
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-150 SDG#: DX024-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166126
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-150 SDG#: DX024-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0833	J 0.0218	1.05	1
11031	12378-PeCDD	40321-76-4	0.697	J 0.0474	5.26	1
11031	123478-HxCDD	39227-28-6	1.94	JB 0.0326	5.26	1
11031	123678-HxCDD	57653-85-7	5.41	B 0.0337	5.26	1
11031	123789-HxCDD	19408-74-3	4.07	JB 0.0346	5.26	1
11031	1234678-HpCDD	35822-46-9	192	B 0.105	5.26	1
11031	OCDD	3268-87-9	2,320	B 0.111	10.5	1
11031	2378-TCDF	51207-31-9	0.277	JBQ 0.0367	1.05	1
11031	12378-PeCDF	57117-41-6	0.671	JB 0.0184	5.26	1
11031	23478-PeCDF	57117-31-4	0.708	JB 0.0169	5.26	1
11031	123478-HxCDF	70648-26-9	2.39	JB 0.0295	5.26	1
11031	123678-HxCDF	57117-44-9	2.60	JB 0.0283	5.26	1
11031	123789-HxCDF	72918-21-9	0.444	JB 0.0352	5.26	1
11031	234678-HxCDF	60851-34-5	3.13	JB 0.0294	5.26	1
11031	1234678-HpCDF	67562-39-4	79.8	B 0.0446	5.26	1
11031	1234789-HpCDF	55673-89-7	5.53	B 0.0586	5.26	1
11031	OCDF	39001-02-0	265	B 0.0491	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166126
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-150 SDG#: DX024-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166126
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-150 SDG#: DX024-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 00:15	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166127
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-181 SDG#: DX024-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166127
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-181 SDG#: DX024-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0500	U	0.0500	1
11031	12378-PeCDD	40321-76-4	0.540	J	0.0871	1
11031	123478-HxCDD	39227-28-6	0.801	JB	0.0858	1
11031	123678-HxCDD	57653-85-7	2.90	JB	0.0821	1
11031	123789-HxCDD	19408-74-3	2.08	JB	0.0747	1
11031	1234678-HpCDD	35822-46-9	72.0	B	0.136	1
11031	OCDD	3268-87-9	1,300	B	0.178	1
11031	2378-TCDF	51207-31-9	0.195	JB	0.0563	1
11031	12378-PeCDF	57117-41-6	0.203	JB	0.0250	1
11031	23478-PeCDF	57117-31-4	0.483	JBQ	0.0310	1
11031	123478-HxCDF	70648-26-9	0.488	JB	0.0523	1
11031	123678-HxCDF	57117-44-9	0.383	JB	0.0526	1
11031	123789-HxCDF	72918-21-9	0.603	JBQ	0.0725	1
11031	234678-HxCDF	60851-34-5	0.448	JB	0.0577	1
11031	1234678-HpCDF	67562-39-4	7.79	B	0.0539	1
11031	1234789-HpCDF	55673-89-7	0.686	JB	0.0711	1
11031	OCDF	39001-02-0	22.0	B	0.124	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	64	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	48	23 - 140
13C12-OCDD	30	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	35	29 - 147
13C12-1234678-HpCDF	53	28 - 143
13C12-1234789-HpCDF	50	26 - 138
13C12-OCDF	32	17 - 157
13C12-1278-TCDD (CRS)	70	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166127
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-181 SDG#: DX024-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166127
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

CDM Federal Programs Corp.

Submitted: 12/16/2010 10:00

14420 Albemarle Point Place

Reported: 02/01/2011 23:46

Suite 210

Chantilly VA 20151

D-181 SDG#: DX024-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 09:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166128
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-136 SDG#: DX024-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.8	0.50	0.50	1

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166128
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-136 SDG#: DX024-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0729	JQ	0.0359	1
11031	12378-PeCDD	40321-76-4	0.719	J	0.0604	1
11031	123478-HxCDD	39227-28-6	1.24	JB	0.0393	1
11031	123678-HxCDD	57653-85-7	4.26	JB	0.0409	1
11031	123789-HxCDD	19408-74-3	3.05	JB	0.0416	1
11031	1234678-HpCDD	35822-46-9	119	B	0.118	1
11031	OCDD	3268-87-9	1,640	B	0.149	1
11031	2378-TCDF	51207-31-9	0.791	JB	0.0660	1
11031	12378-PeCDF	57117-41-6	0.789	JB	0.0332	1
11031	23478-PeCDF	57117-31-4	1.82	JB	0.0305	1
11031	123478-HxCDF	70648-26-9	1.20	JB	0.0394	1
11031	123678-HxCDF	57117-44-9	1.08	JB	0.0395	1
11031	123789-HxCDF	72918-21-9	0.794	JB	0.0438	1
11031	234678-HxCDF	60851-34-5	1.18	JB	0.0380	1
11031	1234678-HpCDF	67562-39-4	14.8	B	0.0457	1
11031	1234789-HpCDF	55673-89-7	1.32	JB	0.0581	1
11031	OCDF	39001-02-0	40.3	B	0.0489	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	48	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	69	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166128
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-136 SDG#: DX024-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166128
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/16/2010 10:00

Suite 210

Reported: 02/01/2011 23:46

Chantilly VA 20151

D-136 SDG#: DX024-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 02:08	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166129
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-203 SDG#: DX024-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166129
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-203 SDG#: DX024-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0484 JQ	0.0193	1.09	1
11031	12378-PeCDD	40321-76-4	0.166 J	0.0367	5.45	1
11031	123478-HxCDD	39227-28-6	0.238 JB	0.0346	5.45	1
11031	123678-HxCDD	57653-85-7	0.760 JB	0.0369	5.45	1
11031	123789-HxCDD	19408-74-3	0.655 JB	0.0406	5.45	1
11031	1234678-HpCDD	35822-46-9	22.3 B	0.0656	5.45	1
11031	OCDD	3268-87-9	312 B	0.0676	10.9	1
11031	2378-TCDF	51207-31-9	0.0825 JBQ	0.0284	1.09	1
11031	12378-PeCDF	57117-41-6	0.483 JB	0.0167	5.45	1
11031	23478-PeCDF	57117-31-4	0.197 JB	0.0172	5.45	1
11031	123478-HxCDF	70648-26-9	0.271 JBQ	0.0314	5.45	1
11031	123678-HxCDF	57117-44-9	0.240 JBQ	0.0263	5.45	1
11031	123789-HxCDF	72918-21-9	0.199 JB	0.0358	5.45	1
11031	234678-HxCDF	60851-34-5	0.238 JB	0.0300	5.45	1
11031	1234678-HpCDF	67562-39-4	2.73 JB	0.0266	5.45	1
11031	1234789-HpCDF	55673-89-7	0.292 JBQ	0.0461	5.45	1
11031	OCDF	39001-02-0	6.06 JB	0.0520	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	66	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166129
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-203 SDG#: DX024-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166129
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/16/2010 10:00

Suite 210

Reported: 02/01/2011 23:46

Chantilly VA 20151

D-203 SDG#: DX024-17

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 03:05	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166130
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-257 SDG#: DX024-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166130
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-257 SDG#: DX024-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.106	JQ 0.0169	1.11	1
11031	12378-PeCDD	40321-76-4	0.851	J 0.0441	5.56	1
11031	123478-HxCDD	39227-28-6	1.63	JB 0.0314	5.56	1
11031	123678-HxCDD	57653-85-7	4.40	JB 0.0324	5.56	1
11031	123789-HxCDD	19408-74-3	3.15	JB 0.0317	5.56	1
11031	1234678-HpCDD	35822-46-9	160	B 0.0958	5.56	1
11031	OCDD	3268-87-9	1,870	B 0.0841	11.1	1
11031	2378-TCDF	51207-31-9	0.367	JB 0.0377	1.11	1
11031	12378-PeCDF	57117-41-6	0.723	JB 0.0178	5.56	1
11031	23478-PeCDF	57117-31-4	0.980	JB 0.0172	5.56	1
11031	123478-HxCDF	70648-26-9	1.77	JB 0.0272	5.56	1
11031	123678-HxCDF	57117-44-9	1.16	JB 0.0257	5.56	1
11031	123789-HxCDF	72918-21-9	0.863	JB 0.0294	5.56	1
11031	234678-HxCDF	60851-34-5	1.38	JB 0.0262	5.56	1
11031	1234678-HpCDF	67562-39-4	21.4	B 0.0292	5.56	1
11031	1234789-HpCDF	55673-89-7	1.86	JB 0.0383	5.56	1
11031	OCDF	39001-02-0	43.4	B 0.0338	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	65	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166130
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-257 SDG#: DX024-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166130
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-257 SDG#: DX024-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 04:01	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166131
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-204 SDG#: DX024-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166131
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-204 SDG#: DX024-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0302 JQ	0.0183	1.07	1
11031	12378-PeCDD	40321-76-4	0.181 JQ	0.0285	5.36	1
11031	123478-HxCDD	39227-28-6	0.204 JB	0.0250	5.36	1
11031	123678-HxCDD	57653-85-7	0.724 JB	0.0290	5.36	1
11031	123789-HxCDD	19408-74-3	0.554 JBQ	0.0272	5.36	1
11031	1234678-HpCDD	35822-46-9	15.6 B	0.0439	5.36	1
11031	OCDD	3268-87-9	179 B	0.0581	10.7	1
11031	2378-TCDF	51207-31-9	0.0681 JB	0.0188	1.07	1
11031	12378-PeCDF	57117-41-6	0.138 JB	0.0140	5.36	1
11031	23478-PeCDF	57117-31-4	0.260 JB	0.0130	5.36	1
11031	123478-HxCDF	70648-26-9	0.173 JBQ	0.0188	5.36	1
11031	123678-HxCDF	57117-44-9	0.226 JBQ	0.0185	5.36	1
11031	123789-HxCDF	72918-21-9	0.116 JB	0.0212	5.36	1
11031	234678-HxCDF	60851-34-5	0.247 JB	0.0179	5.36	1
11031	1234678-HpCDF	67562-39-4	3.15 JB	0.0283	5.36	1
11031	1234789-HpCDF	55673-89-7	0.265 JBQ	0.0347	5.36	1
11031	OCDF	39001-02-0	10.0 JB	0.0374	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	59	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	59	23 - 140
13C12-OCDD	46	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	64	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	49	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166131
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/16/2010 10:00

Reported: 02/01/2011 23:46

D-204 SDG#: DX024-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166131
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

CDM Federal Programs Corp.

Submitted: 12/16/2010 10:00

14420 Albemarle Point Place

Reported: 02/01/2011 23:46

Suite 210

Chantilly VA 20151

D-204 SDG#: DX024-19*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 04:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:46 PM

Group Number: 1225765

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10356162402A 28a Moisture Content by 160.3	Sample number(s): 6166113-6166118				100		80-120		
Batch number: 10356162402B 28a Moisture Content by 160.3	Sample number(s): 6166119,6166121-6166131				100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11006001	Sample number(s): 6166113-6166119,6166121-6166131								
2378-TCDD	0.0130 U	0.0130	1.00	ng/kg	90		67-158		
12378-PeCDD	0.0207 U	0.0207	5.00	ng/kg	92		70-142		
123478-HxCDD	0.0156 J	0.0121	5.00	ng/kg	92		70-164		
123678-HxCDD	0.0249 J	0.0126	5.00	ng/kg	91		76-134		
123789-HxCDD	0.0161 J	0.0117	5.00	ng/kg	93		64-162		
1234678-HpCDD	0.118 J	0.0195	5.00	ng/kg	91		70-140		
OCDD	0.366 J	0.0243	10.0	ng/kg	90		78-144		
2378-TCDF	0.0160 J	0.0138	1.00	ng/kg	102		75-158		
12378-PeCDF	0.0239 J	0.00990	5.00	ng/kg	92		80-134		
23478-PeCDF	0.0586 J	0.00860	5.00	ng/kg	91		68-160		
123478-HxCDF	0.0698 J	0.0117	5.00	ng/kg	87		72-134		
123678-HxCDF	0.0377 J	0.0106	5.00	ng/kg	86		84-130		
123789-HxCDF	0.0373 J	0.0134	5.00	ng/kg	90		78-130		
234678-HxCDF	0.0505 J	0.0104	5.00	ng/kg	87		70-156		
1234678-HpCDF	0.117 J	0.0121	5.00	ng/kg	87		82-122		
1234789-HpCDF	0.0646 J	0.0225	5.00	ng/kg	90		78-138		
OCDF	0.220 J	0.0263	10.0	ng/kg	90		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10356162402A 28a Moisture Content by 160.3	Sample number(s): 6166113-6166118					BKG: P166079 5.1	5.2	2	20
Batch number: 10356162402B 28a Moisture Content by 160.3	Sample number(s): 6166119,6166121-6166131					BKG: P166080 9.9	9.5	4	20

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:46 PM

Group Number: 1225765

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11006001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6166113	70	58	58	57	61	68
6166114	75	62	91	85	84	75
6166115	64	68	77	76	75	73
6166116	73	75	79	78	77	67
6166117	72	82	80	79	79	75
6166118	81	91	89	100	91	78
6166119	75	85	84	96	84	72
6166121	60	67	67	76	67	60
6166122	70	79	80	79	78	79
6166123	65	77	74	83	72	64
6166124	67	78	79	77	77	76
6166125	68	76	76	81	76	69
6166126	70	80	78	78	77	76
6166127	65	62	69	68	67	35
6166128	71	76	79	77	78	78
6166129	67	70	71	80	71	69
6166130	76	84	85	85	85	84
6166131	64	70	73	73	72	69
Blank	69	70	67	71	71	65
OPR	68	69	69	84	72	59

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

6166113	53	50	35	57	58	54
6166114	52	44	18	83	58	80
6166115	62	58	42	73	65	71
6166116	78	53	39	81	74	75
6166117	70	60	47	79	77	76
6166118	110	72	58	90	92	93
6166119	103	64	51	86	84	87
6166121	84	53	43	68	67	72
6166122	76	74	61	81	74	76
6166123	93	62	52	74	76	77
6166124	71	66	54	77	73	76
6166125	81	63	51	80	74	77
6166126	72	69	58	79	75	76
6166127	53	50	32	70	62	64
6166128	69	66	51	79	72	77
6166129	91	67	55	73	71	74
6166130	82	77	65	83	71	82
6166131	64	62	49	71	67	70
Blank	95	62	55	78	75	78
OPR	97	53	45	78	74	79

Limits:	28-143	26-138	17-157	35-197	25-181	32-141

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:46 PM

Group Number: 1225765

Surrogate Quality Control

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6166113	54	62	51	42	69	62
6166114	79	74	44	23	81	64
6166115	69	68	55	39	71	67
6166116	74	73	63	51	77	72
6166117	74	75	64	50	80	79
6166118	92	93	86	72	85	103
6166119	86	85	79	66	80	95
6166121	69	69	65	57	62	75
6166122	75	73	71	58	76	78
6166123	77	76	72	63	68	84
6166124	73	72	63	51	74	76
6166125	76	75	68	56	72	79
6166126	75	74	67	56	76	79
6166127	64	63	48	30	68	60
6166128	74	72	63	48	76	74
6166129	73	66	74	62	69	75
6166130	83	81	76	65	82	85
6166131	59	63	59	46	69	68
Blank	75	78	77	72	64	67
OPR	78	77	75	65	66	81
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

13013

1225765

6166 113-31

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD																Other Instructions and Notes									
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels *For hex chrome analysis, lab will measure Cr and Cr(VI) Samplers: (signature) <i>[Signature]</i>																															
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOC/EPA 8260B	1,4-Dioxane EPA 8260B	SVOCs EPA 8270C & PAHs 8270.3M	TH-900 EPA 8015B	TH-901 EPA 8015B Mod.	*Mercury EPA 8210/4000B/721A	*Hex Chrome EPA 7199*	*Fluoride EPA 8000	*PCBs EPA 8082	*Dioxin/Furan EPA 1631B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 8550	*Pesticides EPA 8061A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrate EPA 350.0	**Formaldehyde EPA 8215A	**pH-NH4A EPA 1625C	**Emergent EPA 8300A	**Cyanide EPA 9012B	**pH EPA 9005C	**Turbidity EPA 8015B	**Glycine EPA 8015B	**Alcohol EPA 8015B			
SL-303-SASB-SS-0.0-0.5	12.15.10	0940	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-262-SASB-SS-0.0-0.5MS	12.15.10	0925	soil	none	2 x 16 oz. jars & 2 6" sleeves																										MS/MSD
SL-302-SASB-SS-0.0-0.5	12.15.10	0949	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
DUP06-SASB-QC-121510	12.15.10	0935	soil	none	1 x 16 oz. jar & 1 6" sleeve																										DUP
SL-263-SASB-SS-0.0-0.5	12.15.10	0907	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-264-SASB-SS-0.0-0.5	12.15.10	0905	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-027-SASB-SB-4.0-5.0	12.15.10	1019	soil	none	3 x 4 oz. jars & 3 16 oz. jars																										
SL-027-SASB-SB-9.0-10.0	12.15.10	1025	soil	none	3 x 4 oz. jars & 3 16 oz. jars																										
SL-027-SASB-SB-4.5	12.15.10	1015	soil	none	5 Encore Samplers																										
SL-027-SASB-SB-8.5	12.15.10	1023	soil	none	5 Encore Samplers																										
TB-121510	12.15.10	0800	water	HCl	3-40 mL VOA vials																										trip blank
EB03-SASB-121510	12.15.10	1215	water	none	6-1 liter ambers																										rinsate
EB03-SASB-121510	12.15.10	1215	water	none	1-500 ml poly																										rinsate
EB03-SASB-121510	12.15.10	1215	water	HNO3	1-500 ml poly																										rinsate
EB15-SASB-121510	12.15.10	1230	water	none	5-1 liter ambers																										rinsate
EB15-SASB-121510	12.15.10	1230	water	none	1-500 ml poly																										rinsate
EB15-SASB-121510	12.15.10	1230	water	HNO3	1-500 ml poly																										rinsate
EB15-SASB-121510	12.15.10	1230	water	HCl	6-40 mL clear VOA vials																										rinsate
SL-132-SASB-SS-0.0-0.5	12.15.10	1105	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-133-SASB-SS-0.0-0.5	12.15.10	1055	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-131-SASB-SS-0.0-0.5	12.15.10	1125	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-135-SASB-SS-0.0-0.5	12.15.10	1113	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-134-SASB-SS-0.0-0.5	12.15.10	1055	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-298-SASB-SB-4.0-5.0	12.15.10	1425	soil	none	3 x 4 oz. jars & 3 16 oz. jars																										
SL-298-SASB-SB-9.0-10.0	12.15.10	1435	soil	none	3 x 4 oz. jars & 3 16 oz. jars																										
SL-298-SASB-SB-4.5	12.15.10	1420	soil	none	5 Encore Samplers																										
SL-298-SASB-SB-9.5	12.15.10	1430	soil	none	5 Encore Samplers																										
SED-021-SIV-SD-0.0-0.5	12.15.10	0921	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SED-018-SIV-SD-0.0-0.5	12.15.10	1231	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SED-019-SIV-SD-0.0-0.5	12.15.10	1153	soil	none	1 x 16 oz. jar & 1 6" sleeve																										VOIDED
SED-016-SIV-SD-0.0-0.5	12.15.10	1341	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-153-SASB-SS-0.0-0.5	12.15.10	1408	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-155-SASB-SS-0.0-0.5	12.15.10	1341	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-149-SASB-SS-0.0-0.5	12.15.10	1550	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-156-SASB-SS-0.0-0.5	12.15.10	1332	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-150-SASB-SS-0.0-0.5	12.15.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-181-SASB-SS-0.0-0.5	12.15.10	1526	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-136-SASB-SS-0.0-0.5	12.15.10	1350	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-203-SASB-SS-0.0-0.5	12.15.10	1500	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-257-SASB-SS-0.0-0.5	12.15.10	1325	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-204-SASB-SS-0.0-0.5	12.15.10	1551	soil	none	1 x 16 oz. jar & 1 6" sleeve																										
SL-297-SASB-4.0-5.0	12.15.10	1600	soil	none	3 4 oz. jars & 3 16 oz. jars																										
SL-297-SASB-7.0-8.0	12.15.10	1606	soil	none	3 4 oz. jars & 3 16 oz. jars																										
SL-297-SASB-4.5	12.15.10	1558	soil	none	5 Encore Samplers																										
SL-297-SASB-7.5	12.15.10	1603	soil	none	5 Encore Samplers																										

SED-019-SIV-SD-0.0-0.5 was voided on 12/10/10 per PB.
NLM 12/30/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 03, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/17/2010

Group Number: 1225974

SDG: DE042

PO Number: 1203-004-007-AL

Release Number: Tracking #11667

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SED-011-SIV-SD-0.0-0.5 Soil	6167468
SED-013-SIV-SD-0.0-0.5 Soil	6167469
SED-017-SIV-SD-0.0-0.5 Soil	6167470
SED-019-SIV-SD-0.0-0.5 Soil	6167471
SED-020-SIV-SD-0.0-0.5 Soil	6167472
SL-147-SA5B-SS-0.0-0.5 Soil	6167473
SL-169-SA5B-SS-0.0-0.5 Soil	6167474
SL-172-SA5B-SS-0.0-0.5 Soil	6167475
SL-173-SA5B-SS-0.0-0.5 Soil	6167476
SL-176-SA5B-SS-0.0-0.5 Soil	6167477
SL-178-SA5B-SS-0.0-0.5 Soil	6167478
SL-186-SA5B-SS-0.0-0.5 Soil	6167479
SL-187-SA5B-SS-0.0-0.5 Soil	6167480
SL-189-SA5B-SS-0.0-0.5 Soil	6167481
SL-189-SA5B-SS-0.0-0.5MS Soil	6167482
SL-189-SA5B-SS-0.0-0.5MSD Soil	6167483
SL-189-SA5B-SS-0.0-0.5DUP Soil	6167484
SL-192-SA5B-SS-0.0-0.5 Soil	6167485
SL-194-SA5B-SS-0.0-0.5 Soil	6167486
SL-196-SA5B-SS-0.0-0.5 Soil	6167487
SL-198-SA5B-SS-0.0-0.5 Soil	6167488
SL-199-SA5B-SS-0.0-0.5 Soil	6167489
SL-202-SA5B-SS-0.0-0.5 Soil	6167490

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgesser

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Matthew E. Barton
Senior Specialist

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD011 SDG#: DE042-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U 180	550	1
04688	Benzyl alcohol	100-51-6	180	U 180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180	1
04688	4-Chloroaniline	106-47-8	74	U 74	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550	1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	95	J 18	370	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	74	U 74	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	37	U 37	180	1
04688	4-Methylphenol	106-44-5	37	U 37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	37	U 37	180	1
04688	4-Nitroaniline	100-01-6	74	U 74	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	550	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD011 SDG#: DE042-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37 U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37 U	37	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74 U	0.74	1.8	1
10138	Acenaphthylene	208-96-8	0.37 U	0.37	1.8	1
10138	Anthracene	120-12-7	0.40 J	0.37	1.8	1
10138	Benzo(a)anthracene	56-55-3	1.5 J	0.74	1.8	1
10138	Benzo(a)pyrene	50-32-8	2.0	0.74	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	3.7	0.74	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.6 J	0.74	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	1.1 J	0.74	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.6 U	6.6	20	1
10138	Di-n-butylphthalate	84-74-2	6.6 U	6.6	20	1
10138	Chrysene	218-01-9	2.7	0.37	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.74 U	0.74	1.8	1
10138	Diethylphthalate	84-66-2	6.6 U	6.6	20	1
10138	Dimethylphthalate	131-11-3	6.6 U	6.6	20	1
10138	Fluoranthene	206-44-0	4.0	0.74	1.8	1
10138	Fluorene	86-73-7	0.74 U	0.74	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.2 J	0.74	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.74 U	0.74	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.74 U	0.74	1.8	1
10138	Naphthalene	91-20-3	1.5 J	0.74	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.74 U	0.74	1.8	1
10138	Di-n-octylphthalate	117-84-0	8.6 J	6.6	20	1
10138	Phenanthrene	85-01-8	2.5	0.74	1.8	1
10138	Pyrene	129-00-0	3.7	0.74	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.9 J	1.3	4.0	1
10401	Dalapon	75-99-0	4.9 U	4.9	9.9	1
10401	2,4-DB	94-82-6	8.9 U	8.9	8.9	1
10401	Dicamba	1918-00-9	0.59 J	0.44	1.3	1
10401	Dinoseb	88-85-7	0.88 U	0.88	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.88 U	0.88	1.9	1
10401	MCPA	94-74-6	84 U	84	280	1
10401	MCPP (Mecoprop)	93-65-2	83 U	83	280	1
10401	2,4,5-T	93-76-5	0.090 U	0.090	0.19	1
10401	2,4,5-TP	93-72-1	0.083 U	0.083	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD011 SDG#: DE042-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Perchlorate	SW-846 6850 1/2007		ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3 U	2.3	5.5	1
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.15 U	0.15	0.18	1
01363	Alpha BHC	319-84-6	1.2	0.037	0.18	1
01363	Beta BHC	319-85-7	0.066 U	0.066	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.11 U	0.11	0.18	1
01363	Chlordane	57-74-9	5.0 U	5.0	5.0	1
01363	p,p-DDD	72-54-8	0.073 U	0.073	0.37	1
01363	p,p-DDE	72-55-9	1.4 U	1.4	1.4	1
01363	p,p-DDT	50-29-3	1.2 U	1.2	1.2	1
01363	Delta BHC	319-86-8	0.27	0.040	0.18	1
01363	Dieldrin	60-57-1	0.073 U	0.073	0.37	1
01363	Endosulfan I	959-98-8	0.13 J	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.30 U	0.30	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.34 U	0.34	0.37	1
01363	Endrin	72-20-8	0.073 U	0.073	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.64 U	0.64	0.64	1
01363	Endrin Ketone	53494-70-5	0.073 U	0.073	0.37	1
01363	Heptachlor	76-44-8	0.13 U	0.13	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.45 U	0.45	0.45	1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8	1
01363	Mirex	2385-85-5	0.60 U	0.60	0.60	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.3	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	2.6 J	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.55 U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.55 U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9	1
10225	PCB-1254	11097-69-1	2.2	0.36	1.9	1
10225	PCB-1260	11096-82-5	1.1 J	0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD011 SDG#: DE042-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,500	5.44	21.6	1
07914	Boron	7440-42-8	5.55	0.962	5.40	1
01650	Calcium	7440-70-2	3,840	6.63	21.6	1
01654	Iron	7439-89-6	18,200	5.09	21.6	1
01656	Lithium	7439-93-2	23.4	0.24	2.2	1
01657	Magnesium	7439-95-4	4,210	2.75	10.8	1
06958	Manganese	7439-96-5	330	0.0843	0.540	1
10145	Phosphorus	7723-14-0	457	0.605	10.8	1
01662	Potassium	7440-09-7	3,370	19.5	54.0	1
01667	Sodium	7440-23-5	75.3 J	40.3	108	1
07968	Strontium	7440-24-6	18.4	0.0670	0.540	1
06969	Tin	7440-31-5	2.50 J	1.08	10.8	1
06970	Titanium	7440-32-6	1,080	0.411	1.08	1
10146	Zirconium	7440-67-7	0.908 U	0.908	5.40	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.189 J	0.0662	0.221	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.56	0.0662	0.441	2
06126	Barium	7440-39-3	119	0.119	0.441	2
06127	Beryllium	7440-41-7	0.675	0.0176	0.110	2
06128	Cadmium	7440-43-9	0.279	0.0397	0.110	2
06131	Chromium	7440-47-3	20.1	0.132	0.441	2
06132	Cobalt	7440-48-4	6.24	0.0221	0.110	2
06133	Copper	7440-50-8	9.70	0.0728	0.441	2
06135	Lead	7439-92-1	13.8	0.0115	0.221	2
06138	Molybdenum	7439-98-7	0.641	0.0551	0.110	2
06139	Nickel	7440-02-0	12.9	0.110	0.441	2
06141	Selenium	7782-49-2	0.148 J	0.0441	0.441	2
06142	Silver	7440-22-4	0.0437 J	0.0132	0.110	2
06145	Thallium	7440-28-0	0.368	0.0331	0.110	2
06148	Vanadium	7440-62-2	41.7	0.0243	0.110	2
06149	Zinc	7440-66-6	91.8	0.617	3.31	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.105	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0	0.88	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	33.1	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.60 J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD011 SDG#: DE042-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	437	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.19	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	9.3	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 13:42	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 17:35	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 00:05	John W Perkins	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110040016A	01/05/2011 15:36	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 18:24	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/30/2010 23:24	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	110040016A	01/05/2011 09:45	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
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SD011 SDG#: DE042-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:43	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:43	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 12:57	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:22	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 08:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/12/2011 22:05	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 15:30	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1

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Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD011 SDG#: DE042-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Sample Description: SED-013-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD013 SDG#: DE042-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U 190	570	1
04688	Benzyl alcohol	100-51-6	190	U 190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190	1
04688	4-Chloroaniline	106-47-8	77	U 77	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570	1
04688	2,4-Dinitrophenol	51-28-5	770	U 770	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	28	J 19	380	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	38	U 38	190	1
04688	4-Methylphenol	106-44-5	38	U 38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	38	U 38	190	1
04688	4-Nitroaniline	100-01-6	77	U 77	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	570	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-013-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD013 SDG#: DE042-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19 U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19 U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38 U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38 U	38	190	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77 U	0.77	1.9	1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38 U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	1.7 J	0.77	1.9	1
10138	Benzo(a)pyrene	50-32-8	2.2	0.77	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	4.1	0.77	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	1.4 J	0.77	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	1.3 J	0.77	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.9 U	6.9	21	1
10138	Di-n-butylphthalate	84-74-2	6.9 U	6.9	21	1
10138	Chrysene	218-01-9	3.0	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.77 U	0.77	1.9	1
10138	Diethylphthalate	84-66-2	6.9 U	6.9	21	1
10138	Dimethylphthalate	131-11-3	6.9 U	6.9	21	1
10138	Fluoranthene	206-44-0	3.8	0.77	1.9	1
10138	Fluorene	86-73-7	0.77 U	0.77	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.2 J	0.77	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.77 U	0.77	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.77 U	0.77	1.9	1
10138	Naphthalene	91-20-3	0.77 U	0.77	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.77 U	0.77	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21	1
10138	Phenanthrene	85-01-8	2.1	0.77	1.9	1
10138	Pyrene	129-00-0	3.4	0.77	1.9	1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.1	1
10401	Dalapon	75-99-0	5.1 U	5.1	10	1
10401	2,4-DB	94-82-6	0.71 U	0.71	2.0	1
10401	Dicamba	1918-00-9	0.78 J	0.46	1.4	1
10401	Dinoseb	88-85-7	0.92 U	0.92	2.8	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92 U	0.92	2.0	1
10401	MCPA	94-74-6	870	87	290	1
10401	MCPP (Mecoprop)	93-65-2	86 U	86	290	1
10401	2,4,5-T	93-76-5	0.094 U	0.094	0.20	1
10401	2,4,5-TP	93-72-1	0.086 U	0.086	0.20	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19	1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19	1

*=This limit was used in the evaluation of the final result

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SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD013 SDG#: DE042-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8081A						
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19	1
01363	Chlordane	57-74-9	7.0 U	7.0	7.0	1
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39	1
01363	p,p-DDE	72-55-9	1.7 U	1.7	1.7	1
01363	p,p-DDT	50-29-3	1.1 U	1.1	1.1	1
01363	Delta BHC	319-86-8	0.071 J	0.041	0.19	1
01363	Dieldrin	60-57-1	0.27 U	0.27	0.39	1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19	1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39	1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39	1
01363	Endrin	72-20-8	0.076 U	0.076	0.39	1
01363	Endrin Aldehyde	7421-93-4	0.85 U	0.85	0.85	1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39	1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.12 U	0.12	0.19	1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9	1
01363	Mirex	2385-85-5	0.55 U	0.55	0.55	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	4.7	1.1	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.57 U	0.57	2.0	1
10225	PCB-1232	11141-16-5	0.60 U	0.60	2.0	1
10225	PCB-1242	53469-21-9	0.57 U	0.57	2.0	1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0	1
10225	PCB-1254	11097-69-1	5.9	0.38	2.0	1
10225	PCB-1260	11096-82-5	3.3	0.38	2.0	1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0	1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	19,000	5.78	23.0	1
07914	Boron	7440-42-8	4.43 J	1.02	5.75	1
01650	Calcium	7440-70-2	4,700	7.05	23.0	1
01654	Iron	7439-89-6	27,700	5.41	23.0	1
01656	Lithium	7439-93-2	32.2	0.25	2.3	1

*=This limit was used in the evaluation of the final result

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SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
LLI Group # 1225974
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SD013 SDG#: DE042-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	6,690	2.92	11.5	1
06958	Manganese	7439-96-5	524	0.0897	0.575	1
10145	Phosphorus	7723-14-0	449	0.644	11.5	1
01662	Potassium	7440-09-7	4,530	20.7	57.5	1
01667	Sodium	7440-23-5	112 J	42.9	115	1
07968	Strontium	7440-24-6	24.5	0.0713	0.575	1
06969	Tin	7440-31-5	2.83 J	1.15	11.5	1
06970	Titanium	7440-32-6	1,550	0.437	1.15	1
10146	Zirconium	7440-67-7	0.966 U	0.966	5.75	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.188 J	0.0657	0.219	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	9.74	0.0657	0.438	2
06126	Barium	7440-39-3	180	0.118	0.438	2
06127	Beryllium	7440-41-7	1.06	0.0175	0.109	2
06128	Cadmium	7440-43-9	0.423	0.0394	0.109	2
06131	Chromium	7440-47-3	37.4	0.131	0.438	2
06132	Cobalt	7440-48-4	9.87	0.0219	0.109	2
06133	Copper	7440-50-8	15.4	0.0722	0.438	2
06135	Lead	7439-92-1	19.8	0.0114	0.219	2
06138	Molybdenum	7439-98-7	0.992	0.0547	0.109	2
06139	Nickel	7440-02-0	21.7	0.109	0.438	2
06141	Selenium	7782-49-2	0.207 J	0.0438	0.438	2
06142	Silver	7440-22-4	0.0981 J	0.0131	0.109	2
06145	Thallium	7440-28-0	0.575	0.0328	0.109	2
06148	Vanadium	7440-62-2	69.0	0.0241	0.109	2
06149	Zinc	7440-66-6	141	0.613	3.28	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0198 J	0.0031	0.109	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6	0.92	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.5	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.95 J	0.23	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	418	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					

*=This limit was used in the evaluation of the final result

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SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.32	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	13.0	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 14:12	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 18:08	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 00:32	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 18:38	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/30/2010 23:43	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-013-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
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SD013 SDG#: DE042-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:46	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:46	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:00	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:23	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 09:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/12/2011 23:37	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 15:46	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD017 SDG#: DE042-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U 190	560	1
04688	Benzyl alcohol	100-51-6	190	U 190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190	1
04688	4-Chloroaniline	106-47-8	75	U 75	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560	1
04688	2,4-Dinitrophenol	51-28-5	750	U 750	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	51	J 19	380	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	38	U 38	190	1
04688	4-Methylphenol	106-44-5	38	U 38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	38	U 38	190	1
04688	4-Nitroaniline	100-01-6	75	U 75	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	560	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD017 SDG#: DE042-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19 U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19 U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38 U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38 U	38	190	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75 U	0.75	1.9	1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38 U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.75 U	0.75	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.75 U	0.75	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.75 U	0.75	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.75 U	0.75	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.75 U	0.75	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8 U	6.8	20	1
10138	Di-n-butylphthalate	84-74-2	6.8 U	6.8	20	1
10138	Chrysene	218-01-9	1.8 J	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.75 U	0.75	1.9	1
10138	Diethylphthalate	84-66-2	6.8 U	6.8	20	1
10138	Dimethylphthalate	131-11-3	6.8 U	6.8	20	1
10138	Fluoranthene	206-44-0	0.75 U	0.75	1.9	1
10138	Fluorene	86-73-7	0.75 U	0.75	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75 U	0.75	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.75 U	0.75	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.75 U	0.75	1.9	1
10138	Naphthalene	91-20-3	0.75 U	0.75	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.75 U	0.75	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.8 U	6.8	20	1
10138	Phenanthrene	85-01-8	0.75 U	0.75	1.9	1
10138	Pyrene	129-00-0	0.75 U	0.75	1.9	1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.9 J	1.4	4.1	1
10401	Dalapon	75-99-0	5.0 U	5.0	10	1
10401	2,4-DB	94-82-6	0.70 U	0.70	1.9	1
10401	Dicamba	1918-00-9	0.49 J	0.45	1.4	1
10401	Dinoseb	88-85-7	0.90 U	0.90	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90 U	0.90	1.9	1
10401	MCPA	94-74-6	360 U	360	360	1
10401	MCPP (Mecoprop)	93-65-2	220 J	85	280	1
10401	2,4,5-T	93-76-5	0.093 U	0.093	0.19	1
10401	2,4,5-TP	93-72-1	0.085 U	0.085	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD017 SDG#: DE042-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.075 U	0.075	0.19	1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.19	1
01363	Beta BHC	319-85-7	0.068 U	0.068	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.19	1
01363	Chlordane	57-74-9	2.1 U	2.1	3.8	1
01363	p,p-DDD	72-54-8	0.075 U	0.075	0.38	1
01363	p,p-DDE	72-55-9	1.3 U	1.3	1.3	1
01363	p,p-DDT	50-29-3	2.1 U	2.1	2.1	1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19	1
01363	Dieldrin	60-57-1	0.34 U	0.34	0.38	1
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.19	1
01363	Endosulfan II	33213-65-9	0.15 U	0.15	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.075 U	0.075	0.38	1
01363	Endrin	72-20-8	0.075 U	0.075	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.28 U	0.28	0.38	1
01363	Endrin Ketone	53494-70-5	0.22 U	0.22	0.38	1
01363	Heptachlor	76-44-8	0.068 U	0.068	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.055 U	0.055	0.19	1
01363	Methoxychlor	72-43-5	0.38 U	0.38	1.9	1
01363	Mirex	2385-85-5	0.55 U	0.55	0.55	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.5	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

The TCX surrogate data is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.3 U	2.3	7.5	2
10225	Aroclor 5442	12642-23-8	2.3 U	2.3	7.5	2
10225	Aroclor 5460	11126-42-4	13	2.3	7.5	2
10225	PCB-1016	12674-11-2	0.75 U	0.75	3.8	2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.8	2
10225	PCB-1232	11141-16-5	1.2 U	1.2	3.8	2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.8	2
10225	PCB-1248	12672-29-6	0.75 U	0.75	3.8	2
10225	PCB-1254	11097-69-1	4.1	0.75	3.8	2
10225	PCB-1260	11096-82-5	6.9	0.75	3.8	2
10225	PCB-1262	37324-23-5	0.75 U	0.75	3.8	2
10225	PCB-1268	11100-14-4	0.75 U	0.75	3.8	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD017 SDG#: DE042-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,100	5.57	22.2	1
07914	Boron	7440-42-8	5.92	0.986	5.54	1
01650	Calcium	7440-70-2	5,400	6.79	22.2	1
01654	Iron	7439-89-6	17,500	5.22	22.2	1
01656	Lithium	7439-93-2	22.2	0.24	2.2	1
01657	Magnesium	7439-95-4	4,030	2.81	11.1	1
06958	Manganese	7439-96-5	270	0.0864	0.554	1
10145	Phosphorus	7723-14-0	475	0.620	11.1	1
01662	Potassium	7440-09-7	3,590	19.9	55.4	1
01667	Sodium	7440-23-5	79.4 J	41.3	111	1
07968	Strontium	7440-24-6	23.6	0.0687	0.554	1
06969	Tin	7440-31-5	2.51 J	1.11	11.1	1
06970	Titanium	7440-32-6	1,080	0.421	1.11	1
10146	Zirconium	7440-67-7	1.45 J	0.931	5.54	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.210 J	0.0665	0.222	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.45	0.0665	0.443	2
06126	Barium	7440-39-3	136	0.120	0.443	2
06127	Beryllium	7440-41-7	0.735	0.0177	0.111	2
06128	Cadmium	7440-43-9	0.743	0.0399	0.111	2
06131	Chromium	7440-47-3	30.3	0.133	0.443	2
06132	Cobalt	7440-48-4	7.30	0.0222	0.111	2
06133	Copper	7440-50-8	16.0	0.0731	0.443	2
06135	Lead	7439-92-1	29.7	0.0115	0.222	2
06138	Molybdenum	7439-98-7	0.865	0.0554	0.111	2
06139	Nickel	7440-02-0	15.7	0.111	0.443	2
06141	Selenium	7782-49-2	0.120 J	0.0443	0.443	2
06142	Silver	7440-22-4	0.141	0.0133	0.111	2
06145	Thallium	7440-28-0	0.387	0.0332	0.111	2
06148	Vanadium	7440-62-2	52.1	0.0244	0.111	2
06149	Zinc	7440-66-6	117	0.620	3.32	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0741 J	0.0031	0.107	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1 J	0.90	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	33.9	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.56 J	0.23	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
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Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD017 SDG#: DE042-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	426	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.92	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	11.5	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 14:41	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 18:41	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 00:59	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 19:06	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 00:02	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD017 SDG#: DE042-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:55	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:55	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:07	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:24	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 09:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 00:01	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 16:02	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD019 SDG#: DE042-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	220	U 220	670	1
04688	Benzidine	92-87-5	1,600	U 1,600	4,500	1
04688	Benzo(a)anthracene	56-55-3	24	J 22	220	1
04688	Benzoic acid	65-85-0	220	U 220	670	1
04688	Benzyl alcohol	100-51-6	220	U 220	670	1
04688	4-Bromophenyl-phenylether	101-55-3	22	U 22	220	1
04688	Butylbenzylphthalate	85-68-7	42	J 22	220	1
04688	Di-n-butylphthalate	84-74-2	26	J 22	220	1
04688	Carbazole	86-74-8	22	U 22	220	1
04688	4-Chloro-3-methylphenol	59-50-7	45	U 45	220	1
04688	4-Chloroaniline	106-47-8	90	U 90	220	1
04688	bis(2-Chloroethoxy)methane	111-91-1	22	U 22	220	1
04688	bis(2-Chloroethyl)ether	111-44-4	22	U 22	220	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	22	U 22	220	1
04688	2-Chloronaphthalene	91-58-7	22	U 22	220	1
04688	2-Chlorophenol	95-57-8	22	U 22	220	1
04688	4-Chlorophenyl-phenylether	7005-72-3	45	U 45	220	1
04688	Chrysene	218-01-9	37	J 22	220	1
04688	Dibenzofuran	132-64-9	22	U 22	220	1
04688	1,2-Dichlorobenzene	95-50-1	22	U 22	220	1
04688	1,3-Dichlorobenzene	541-73-1	22	U 22	220	1
04688	1,4-Dichlorobenzene	106-46-7	22	U 22	220	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U 130	450	1
04688	2,4-Dichlorophenol	120-83-2	22	U 22	220	1
04688	Diethylphthalate	84-66-2	22	U 22	220	1
04688	2,4-Dimethylphenol	105-67-9	45	U 45	220	1
04688	3,5-Dimethylphenol	108-68-9	45	U 45	220	1
04688	Dimethylphthalate	131-11-3	22	U 22	220	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	220	U 220	670	1
04688	2,4-Dinitrophenol	51-28-5	900	U 900	2,700	1
04688	2,4-Dinitrotoluene	121-14-2	45	U 45	220	1
04688	2,6-Dinitrotoluene	606-20-2	22	U 22	220	1
04688	1,2-Diphenylhydrazine	122-66-7	22	U 22	220	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	120	J 22	450	1
04688	Fluoranthene	206-44-0	71	J 22	220	1
04688	Hexachlorobenzene	118-74-1	22	U 22	220	1
04688	Hexachlorobutadiene	87-68-3	90	U 90	220	1
04688	Hexachlorocyclopentadiene	77-47-4	220	U 220	670	1
04688	Hexachloroethane	67-72-1	22	U 22	220	1
04688	Isophorone	78-59-1	22	U 22	220	1
04688	2-Methylphenol	95-48-7	45	U 45	220	1
04688	4-Methylphenol	106-44-5	45	U 45	220	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	22	U 22	220	1
04688	3-Nitroaniline	99-09-2	45	U 45	220	1
04688	4-Nitroaniline	100-01-6	90	U 90	220	1
04688	Nitrobenzene	98-95-3	22	U 22	220	1
04688	2-Nitrophenol	88-75-5	22	U 22	220	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD019 SDG#: DE042-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	4-Nitrophenol	100-02-7	220 U	220	670	1
04688	N-Nitroso-di-n-propylamine	621-64-7	22 U	22	220	1
04688	N-Nitrosodiphenylamine	86-30-6	22 U	22	220	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	22 U	22	220	1
04688	Pentachlorophenol	87-86-5	220 U	220	670	1
04688	Phenol	108-95-2	22 U	22	220	1
04688	Pyrene	129-00-0	47 J	22	220	1
04688	1,2,4-Trichlorobenzene	120-82-1	22 U	22	220	1
04688	2,4,5-Trichlorophenol	95-95-4	45 U	45	220	1
04688	2,4,6-Trichlorophenol	88-06-2	45 U	45	220	1

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	4.5 U	4.5	11	5
10138	Acenaphthylene	208-96-8	2.2 U	2.2	11	5
10138	Anthracene	120-12-7	6.0 J	2.2	11	5
10138	Benzo(a)pyrene	50-32-8	16	4.5	11	5
10138	Benzo(b)fluoranthene	205-99-2	35	4.5	11	5
10138	Benzo(g,h,i)perylene	191-24-2	12	4.5	11	5
10138	Benzo(k)fluoranthene	207-08-9	9.7 J	4.5	11	5
10138	Dibenz(a,h)anthracene	53-70-3	4.5 U	4.5	11	5
10138	Fluorene	86-73-7	4.5 U	4.5	11	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	8.6 J	4.5	11	5
10138	1-Methylnaphthalene	90-12-0	4.5 U	4.5	11	5
10138	2-Methylnaphthalene	91-57-6	4.5 U	4.5	11	5
10138	Naphthalene	91-20-3	9.0 J	4.5	11	5
10138	N-Nitrosodimethylamine	62-75-9	4.5 U	4.5	11	5
10138	Phenanthrene	85-01-8	22	4.5	11	5

Reporting limits were raised due to interference from the sample matrix.

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.6	U	1.6	4.9	1
10401	Dalapon	75-99-0	5.9	U	5.9	12	1
10401	2,4-DB	94-82-6	0.84	U	0.84	2.3	1
10401	Dicamba	1918-00-9	0.73	J	0.54	1.6	1
10401	Dinoseb	88-85-7	1.1	U	1.1	3.2	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.1	U	1.1	2.3	1
10401	MCPA	94-74-6	700		100	340	1
10401	MCPP (Mecoprop)	93-65-2	670	U	670	670	1
10401	2,4,5-T	93-76-5	0.62	U	0.62	0.62	1
10401	2,4,5-TP	93-72-1	0.53		0.10	0.23	

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD019 SDG#: DE042-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Aldrin	309-00-2	0.44 U	0.44	1.1	5
01363	Alpha BHC	319-84-6	0.23 U	0.23	1.1	5
01363	Beta BHC	319-85-7	0.40 U	0.40	1.1	5
01363	Gamma BHC - Lindane	58-89-9	0.23 U	0.23	1.1	5
01363	Chlordane	57-74-9	22 U	22	23	5
01363	p,p-DDD	72-54-8	19 U	19	19	20
01363	p,p-DDE	72-55-9	2.1 U	2.1	2.3	5
01363	p,p-DDT	50-29-3	32 U	32	32	20
01363	Delta BHC	319-86-8	0.29 J	0.24	1.1	5
01363	Dieldrin	60-57-1	1.6 U	1.6	2.3	5
01363	Endosulfan I	959-98-8	0.30 U	0.30	1.1	5
01363	Endosulfan II	33213-65-9	1.6 U	1.6	2.3	5
01363	Endosulfan Sulfate	1031-07-8	0.44 U	0.44	2.3	5
01363	Endrin	72-20-8	0.44 U	0.44	2.3	5
01363	Endrin Aldehyde	7421-93-4	5.9 U	5.9	5.9	5
01363	Endrin Ketone	53494-70-5	0.44 U	0.44	2.3	5
01363	Heptachlor	76-44-8	0.40 U	0.40	1.1	5
01363	Heptachlor Epoxide	1024-57-3	0.75 U	0.75	1.1	5
01363	Methoxychlor	72-43-5	2.3 U	2.3	11	5
01363	Mirex	2385-85-5	1.8 U	1.8	2.3	5
01363	Toxaphene	8001-35-2	15 U	15	44	5
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.						
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	13 U	13	44	10
10225	Aroclor 5442	12642-23-8	13 U	13	44	10
10225	Aroclor 5460	11126-42-4	130	13	44	10
10225	PCB-1016	12674-11-2	4.4 U	4.4	23	10
10225	PCB-1221	11104-28-2	6.7 U	6.7	23	10
10225	PCB-1232	11141-16-5	7.0 U	7.0	23	10
10225	PCB-1242	53469-21-9	6.7 U	6.7	23	10
10225	PCB-1248	12672-29-6	4.4 U	4.4	23	10
10225	PCB-1254	11097-69-1	99	4.4	23	10
10225	PCB-1260	11096-82-5	180	4.4	23	10
10225	PCB-1262	37324-23-5	4.4 U	4.4	23	10
10225	PCB-1268	11100-14-4	4.4 U	4.4	23	10
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	16,900	6.52	25.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD019 SDG#: DE042-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
07914	Boron	7440-42-8	6.31 J	1.15	6.48	1
01650	Calcium	7440-70-2	3,050	7.94	25.9	1
01654	Iron	7439-89-6	25,200	6.10	25.9	1
01656	Lithium	7439-93-2	26.8	0.29	2.6	1
01657	Magnesium	7439-95-4	4,990	3.29	13.0	1
06958	Manganese	7439-96-5	269	0.101	0.648	1
10145	Phosphorus	7723-14-0	707	0.726	13.0	1
01662	Potassium	7440-09-7	3,540	23.3	64.8	1
01667	Sodium	7440-23-5	136	48.3	130	1
07968	Strontium	7440-24-6	26.2	0.0803	0.648	1
06969	Tin	7440-31-5	3.05 J	1.30	13.0	1
06970	Titanium	7440-32-6	1,270	0.492	1.30	1
10146	Zirconium	7440-67-7	1.15 J	1.09	6.48	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.931	0.0785	0.262	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	11.1	0.0785	0.523	2
06126	Barium	7440-39-3	183	0.141	0.523	2
06127	Beryllium	7440-41-7	1.07	0.0209	0.131	2
06128	Cadmium	7440-43-9	2.23	0.0471	0.131	2
06131	Chromium	7440-47-3	40.2	0.157	0.523	2
06132	Cobalt	7440-48-4	11.2	0.0262	0.131	2
06133	Copper	7440-50-8	50.5	0.0864	0.523	2
06135	Lead	7439-92-1	54.2	0.0136	0.262	2
06138	Molybdenum	7439-98-7	3.69	0.0654	0.131	2
06139	Nickel	7440-02-0	23.5	0.131	0.523	2
06141	Selenium	7782-49-2	0.202 J	0.0523	0.523	2
06142	Silver	7440-22-4	0.267	0.0157	0.131	2
06145	Thallium	7440-28-0	0.505	0.0393	0.131	2
06148	Vanadium	7440-62-2	68.2	0.0288	0.131	2
06149	Zinc	7440-66-6	308	1.83	9.81	5
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.574	0.0036	0.127	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4	1.1	1.3	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	12.1 U	12.1	40.4	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.27 U	0.27	1.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD019 SDG#: DE042-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	557	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	4.76	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	25.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 15:10	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 19:14	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 01:27	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 19:21	Jamie L Brillhart	5
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 19:36	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 00:20	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD019 SDG#: DE042-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:58	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:58	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:09	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	01/04/2011 13:52	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:25	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 09:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 00:24	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11013243202A	01/18/2011 16:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD020 SDG#: DE042-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	72	U 72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	72	U 72	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	540	1
04688	Phenol	108-95-2	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD020 SDG#: DE042-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36 U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36 U	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72 U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36 U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.72 U	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.72 U	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.72 U	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.72 U	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.72 U	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5 U	6.5	20	1
10138	Di-n-butylphthalate	84-74-2	6.5 U	6.5	20	1
10138	Chrysene	218-01-9	0.36 U	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	20	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5 U	6.5	20	1
10138	Fluoranthene	206-44-0	0.72 U	0.72	1.8	1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72 U	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20	1
10138	Phenanthrene	85-01-8	0.72 U	0.72	1.8	1
10138	Pyrene	129-00-0	0.72 U	0.72	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8 U	4.8	9.8	1
10401	2,4-DB	94-82-6	10 U	10	10	1
10401	Dicamba	1918-00-9	0.57 J	0.43	1.3	1
10401	Dinoseb	88-85-7	0.87 U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87 U	0.87	1.8	1
10401	MCPA	94-74-6	310	83	270	1
10401	MCPP (Mecoprop)	93-65-2	540 U	540	540	1
10401	2,4,5-T	93-76-5	0.089 U	0.089	0.18	1
10401	2,4,5-TP	93-72-1	0.082 U	0.082	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD020 SDG#: DE042-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Perchlorate SW-846 6850 1/2007						
06557	6a Perchlorate EPA 6850	14797-73-0	2.3 U	2.3	5.4	1
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.072 U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.065 U	0.065	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037 U	0.037	0.18	1
01363	Chlordane	57-74-9	3.0 U	3.0	3.7	1
01363	p,p-DDD	72-54-8	0.17 U	0.17	0.37	1
01363	p,p-DDE	72-55-9	0.41 U	0.41	0.41	1
01363	p,p-DDT	50-29-3	1.0 U	1.0	1.0	1
01363	Delta BHC	319-86-8	0.075 J	0.039	0.18	1
01363	Dieldrin	60-57-1	0.072 U	0.072	0.37	1
01363	Endosulfan I	959-98-8	0.093 U	0.093	0.18	1
01363	Endosulfan II	33213-65-9	0.13 U	0.13	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072 U	0.072	0.37	1
01363	Endrin	72-20-8	0.072 U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.072 U	0.072	0.37	1
01363	Endrin Ketone	53494-70-5	0.072 U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.065 U	0.065	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.074 U	0.074	0.18	1
01363	Methoxychlor	72-43-5	0.58 U	0.58	1.8	1
01363	Mirex	2385-85-5	0.33 U	0.33	0.37	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.2	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	2.2 U	2.2	7.2	2
10225	Aroclor 5442	12642-23-8	2.2 U	2.2	7.2	2
10225	Aroclor 5460	11126-42-4	6.6 J	2.2	7.2	2
10225	PCB-1016	12674-11-2	0.72 U	0.72	3.7	2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.7	2
10225	PCB-1232	11141-16-5	1.1 U	1.1	3.7	2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.7	2
10225	PCB-1248	12672-29-6	0.72 U	0.72	3.7	2
10225	PCB-1254	11097-69-1	2.5 J	0.72	3.7	2
10225	PCB-1260	11096-82-5	10	0.72	3.7	2
10225	PCB-1262	37324-23-5	0.72 U	0.72	3.7	2
10225	PCB-1268	11100-14-4	0.72 U	0.72	3.7	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals SW-846 6010B mg/kg mg/kg mg/kg

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD020 SDG#: DE042-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	9,110	5.36	21.3	1
07914	Boron	7440-42-8	3.88 J	0.948	5.33	1
01650	Calcium	7440-70-2	2,190	6.53	21.3	1
01654	Iron	7439-89-6	14,100	5.02	21.3	1
01656	Lithium	7439-93-2	22.5	0.23	2.1	1
01657	Magnesium	7439-95-4	3,380	2.71	10.7	1
06958	Manganese	7439-96-5	206	0.0831	0.533	1
10145	Phosphorus	7723-14-0	310	0.597	10.7	1
01662	Potassium	7440-09-7	2,480	19.2	53.3	1
01667	Sodium	7440-23-5	60.8 J	39.7	107	1
07968	Strontium	7440-24-6	12.8	0.0661	0.533	1
06969	Tin	7440-31-5	2.28 J	1.07	10.7	1
06970	Titanium	7440-32-6	868	0.405	1.07	1
10146	Zirconium	7440-67-7	0.895 U	0.895	5.33	1
SW-846 6020						
	mg/kg		mg/kg	mg/kg		
06124	Antimony	7440-36-0	0.191 J	0.0627	0.209	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.71	0.0627	0.418	2
06126	Barium	7440-39-3	95.9	0.113	0.418	2
06127	Beryllium	7440-41-7	0.548	0.0167	0.105	2
06128	Cadmium	7440-43-9	0.311	0.0376	0.105	2
06131	Chromium	7440-47-3	19.0	0.125	0.418	2
06132	Cobalt	7440-48-4	5.25	0.0209	0.105	2
06133	Copper	7440-50-8	8.77	0.0690	0.418	2
06135	Lead	7439-92-1	12.2	0.0109	0.209	2
06138	Molybdenum	7439-98-7	0.497	0.0523	0.105	2
06139	Nickel	7440-02-0	11.1	0.105	0.418	2
06141	Selenium	7782-49-2	0.0829 J	0.0418	0.418	2
06142	Silver	7440-22-4	0.0561 J	0.0125	0.105	2
06145	Thallium	7440-28-0	0.284	0.0314	0.105	2
06148	Vanadium	7440-62-2	38.2	0.0230	0.105	2
06149	Zinc	7440-66-6	96.5	0.585	3.14	2
SW-846 7471A						
	mg/kg		mg/kg	mg/kg		
00159	Mercury	7439-97-6	0.0051 J	0.0030	0.105	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1	0.87	1.1	1
EPA 314.0						
	ug/kg		ug/kg	ug/kg		
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.6	1
SW-846 7199						
	mg/kg		mg/kg	mg/kg		
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD020 SDG#: DE042-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	477	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.84	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	8.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 15:40	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 19:46	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 01:54	John W Perkins	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110040016A	01/05/2011 15:54	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 19:51	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 00:39	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	110040016A	01/05/2011 09:45	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD020 SDG#: DE042-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:01	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:01	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:12	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:27	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 09:47	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 00:47	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11013243202A	01/18/2011 16:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SD020 SDG#: DE042-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL147 SDG#: DE042-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U 190	570	1
04688	Benzyl alcohol	100-51-6	190	U 190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190	1
04688	4-Chloroaniline	106-47-8	76	U 76	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570	1
04688	2,4-Dinitrophenol	51-28-5	760	U 760	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	44	J 19	380	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	38	U 38	190	1
04688	4-Methylphenol	106-44-5	38	U 38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	38	U 38	190	1
04688	4-Nitroaniline	100-01-6	76	U 76	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	570	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL147 SDG#: DE042-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19 U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19 U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38 U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38 U	38	190	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76 U	0.76	1.9	1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38 U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	15	0.76	1.9	1
10138	Benzo(a)pyrene	50-32-8	15	0.76	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	18	0.76	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	6.2	0.76	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	4.8	0.76	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.9 U	6.9	21	1
10138	Di-n-butylphthalate	84-74-2	6.9 U	6.9	21	1
10138	Chrysene	218-01-9	26	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	1.9 J	0.76	1.9	1
10138	Diethylphthalate	84-66-2	6.9 U	6.9	21	1
10138	Dimethylphthalate	131-11-3	6.9 U	6.9	21	1
10138	Fluoranthene	206-44-0	10	0.76	1.9	1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.7	0.76	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9	1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21	1
10138	Phenanthrene	85-01-8	2.8	0.76	1.9	1
10138	Pyrene	129-00-0	12	0.76	1.9	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.4 U	1.4	4.1	1
10401	Dalapon	75-99-0	5.0 U	5.0	10	1
10401	2,4-DB	94-82-6	0.71 U	0.71	1.9	1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4	1
10401	Dinoseb	88-85-7	0.92 U	0.92	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92 U	0.92	1.9	1
10401	MCPA	94-74-6	260 J	87	290	1
10401	MCPP (Mecoprop)	93-65-2	1,800 U	1,800	1,800	1
10401	2,4,5-T	93-76-5	0.21	0.094	0.19	1
10401	2,4,5-TP	93-72-1	0.086 U	0.086	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL147 SDG#: DE042-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19	1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19	1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.088 U	0.088	0.19	1
01363	Chlordane	57-74-9	7.2 U	7.2	7.2	1
01363	p,p-DDD	72-54-8	0.97 U	0.97	0.97	1
01363	p,p-DDE	72-55-9	0.84 U	0.84	0.84	1
01363	p,p-DDT	50-29-3	7.4 U	7.4	7.4	5
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19	1
01363	Dieldrin	60-57-1	1.4 U	1.4	1.4	1
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.19	1
01363	Endosulfan II	33213-65-9	0.21 U	0.21	0.39	1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39	1
01363	Endrin	72-20-8	0.076 U	0.076	0.39	1
01363	Endrin Aldehyde	7421-93-4	2.6 U	2.6	2.6	1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39	1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19	1
01363	Heptachlor Epoxide	1024-57-3	1.4 U	1.4	1.4	5
01363	Methoxychlor	72-43-5	0.48 U	0.48	1.9	1
01363	Mirex	2385-85-5	0.64 U	0.64	0.64	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	5.7 U	5.7	19	5
10225	Aroclor 5442	12642-23-8	5.7 U	5.7	19	5
10225	Aroclor 5460	11126-42-4	62 U	5.7	19	5
10225	PCB-1016	12674-11-2	1.9 U	1.9	9.7	5
10225	PCB-1221	11104-28-2	2.9 U	2.9	9.7	5
10225	PCB-1232	11141-16-5	3.0 U	3.0	9.7	5
10225	PCB-1242	53469-21-9	2.9 U	2.9	9.7	5
10225	PCB-1248	12672-29-6	1.9 U	1.9	9.7	5
10225	PCB-1254	11097-69-1	44 U	1.9	9.7	5
10225	PCB-1260	11096-82-5	89 U	1.9	9.7	5
10225	PCB-1262	37324-23-5	1.9 U	1.9	9.7	5
10225	PCB-1268	11100-14-4	1.9 U	1.9	9.7	5
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,300	5.76	22.9	1
07914	Boron	7440-42-8	4.18 J	1.02	5.72	1
01650	Calcium	7440-70-2	4,340	7.01	22.9	1
01654	Iron	7439-89-6	19,000	5.39	22.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL147 SDG#: DE042-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	21.8	0.25	2.3	1
01657	Magnesium	7439-95-4	4,210	2.91	11.4	1
06958	Manganese	7439-96-5	211	0.0892	0.572	1
10145	Phosphorus	7723-14-0	420	0.641	11.4	1
01662	Potassium	7440-09-7	2,620	20.6	57.2	1
01667	Sodium	7440-23-5	123	42.7	114	1
07968	Strontium	7440-24-6	17.4	0.0709	0.572	1
06969	Tin	7440-31-5	2.28 J	1.14	11.4	1
06970	Titanium	7440-32-6	1,120	0.435	1.14	1
10146	Zirconium	7440-67-7	1.47 J	0.961	5.72	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.319	0.0686	0.229	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	9.55	0.0686	0.458	2
06126	Barium	7440-39-3	176	0.124	0.458	2
06127	Beryllium	7440-41-7	0.926	0.0183	0.114	2
06128	Cadmium	7440-43-9	0.806	0.0412	0.114	2
06131	Chromium	7440-47-3	36.7	0.137	0.458	2
06132	Cobalt	7440-48-4	10.9	0.0229	0.114	2
06133	Copper	7440-50-8	20.3	0.0755	0.458	2
06135	Lead	7439-92-1	40.9	0.0119	0.229	2
06138	Molybdenum	7439-98-7	1.78	0.0572	0.114	2
06139	Nickel	7440-02-0	23.9	0.114	0.458	2
06141	Selenium	7782-49-2	0.143 J	0.0458	0.458	2
06142	Silver	7440-22-4	0.228	0.0137	0.114	2
06145	Thallium	7440-28-0	0.395	0.0343	0.114	2
06148	Vanadium	7440-62-2	63.6	0.0252	0.114	2
06149	Zinc	7440-66-6	161	0.641	3.43	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.148	0.0031	0.110	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.4	0.92	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.3	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.1 J	0.23	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	456	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL147 SDG#: DE042-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.84	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 16:09	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 20:19	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 02:22	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 20:05	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 20:20	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 00:57	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL147 SDG#: DE042-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:04	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:04	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:14	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	01/04/2011 13:14	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:28	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 10:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 01:10	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 16:50	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL169 SDG#: DE042-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570	1
04688	Benidine	92-87-5	1,300	U 1,300	3,800	1
04688	Benzo(g,h,i)perylene	191-24-2	72	J 19	190	1
04688	Benzoic acid	65-85-0	190	U 190	570	1
04688	Benzyl alcohol	100-51-6	190	U 190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190	1
04688	4-Chloroaniline	106-47-8	76	U 76	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570	1
04688	2,4-Dinitrophenol	51-28-5	760	U 760	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J 19	380	1
04688	Fluoranthene	206-44-0	21	J 19	190	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	82	J 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	38	U 38	190	1
04688	4-Methylphenol	106-44-5	38	U 38	190	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	38	U 38	190	1
04688	4-Nitroaniline	100-01-6	76	U 76	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL169 SDG#: DE042-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	570	1
04688	Phenol	108-95-2	19	U 19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9	1
10138	Acenaphthylene	208-96-8	0.90	J 0.38	1.9	1
10138	Anthracene	120-12-7	2.0	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	10	0.76	1.9	1
10138	Benzo(a)pyrene	50-32-8	23	0.76	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	49	0.76	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	13	0.76	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8	U 6.8	20	1
10138	Di-n-butylphthalate	84-74-2	6.8	U 6.8	20	1
10138	Chrysene	218-01-9	20	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	5.0	0.76	1.9	1
10138	Diethylphthalate	84-66-2	6.8	U 6.8	20	1
10138	Dimethylphthalate	131-11-3	6.8	U 6.8	20	1
10138	Fluorene	86-73-7	0.76	U 0.76	1.9	1
10138	1-Methylnaphthalene	90-12-0	5.3	0.76	1.9	1
10138	2-Methylnaphthalene	91-57-6	6.2	0.76	1.9	1
10138	Naphthalene	91-20-3	4.4	0.76	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U 0.76	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.8	U 6.8	20	1
10138	Phenanthrene	85-01-8	14	0.76	1.9	1
10138	Pyrene	129-00-0	16	0.76	1.9	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.4	U 1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U 5.0	10	1
10401	2,4-DB	94-82-6	15	U 15	15	1
10401	Dicamba	1918-00-9	0.45	U 0.45	1.4	1
10401	Dinoseb	88-85-7	0.91	U 0.91	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.6	U 1.6	1.9	1
10401	MCPA	94-74-6	510	86	280	1
10401	MCPP (Mecoprop)	93-65-2	520	U 520	520	1
10401	2,4,5-T	93-76-5	0.093	U 0.093	0.19	1
10401	2,4,5-TP	93-72-1	0.085	U 0.085	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL169 SDG#: DE042-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Aldrin	309-00-2	0.075 U	0.075	0.19	1
01363	Alpha BHC	319-84-6	0.057 J	0.039	0.19	1
01363	Beta BHC	319-85-7	0.068 U	0.068	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19	1
01363	Chlordane	57-74-9	3.5 U	3.5	3.9	1
01363	p,p-DDD	72-54-8	0.34 U	0.34	0.39	1
01363	p,p-DDE	72-55-9	0.82 U	0.82	0.82	1
01363	p,p-DDT	50-29-3	0.82 U	0.82	0.82	1
01363	Delta BHC	319-86-8	0.056 J	0.041	0.19	1
01363	Dieldrin	60-57-1	0.075 U	0.075	0.39	1
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.19	1
01363	Endosulfan II	33213-65-9	0.095 U	0.095	0.39	1
01363	Endosulfan Sulfate	1031-07-8	0.075 U	0.075	0.39	1
01363	Endrin	72-20-8	0.075 U	0.075	0.39	1
01363	Endrin Aldehyde	7421-93-4	0.32 U	0.32	0.39	1
01363	Endrin Ketone	53494-70-5	0.075 U	0.075	0.39	1
01363	Heptachlor	76-44-8	0.068 U	0.068	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.25 U	0.25	0.25	1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9	1
01363	Mirex	2385-85-5	0.25 U	0.25	0.39	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.5	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	2.3 U	2.3	7.5	2
10225	Aroclor 5442	12642-23-8	2.3 U	2.3	7.5	2
10225	Aroclor 5460	11126-42-4	7.0 J	2.3	7.5	2
10225	PCB-1016	12674-11-2	0.75 U	0.75	3.9	2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.9	2
10225	PCB-1232	11141-16-5	1.2 U	1.2	3.9	2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.9	2
10225	PCB-1248	12672-29-6	0.75 U	0.75	3.9	2
10225	PCB-1254	11097-69-1	16	0.75	3.9	2
10225	PCB-1260	11096-82-5	8.0	0.75	3.9	2
10225	PCB-1262	37324-23-5	0.75 U	0.75	3.9	2
10225	PCB-1268	11100-14-4	0.75 U	0.75	3.9	2
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	15,700	5.54	22.0	1
07914	Boron	7440-42-8	6.43	0.980	5.50	1
01650	Calcium	7440-70-2	4,530	6.75	22.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL169 SDG#: DE042-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	20,200	5.18	22.0	1
01656	Lithium	7439-93-2	22.7	0.24	2.2	1
01657	Magnesium	7439-95-4	4,380	2.80	11.0	1
06958	Manganese	7439-96-5	325	0.0859	0.550	1
10145	Phosphorus	7723-14-0	444	0.616	11.0	1
01662	Potassium	7440-09-7	3,530	19.8	55.0	1
01667	Sodium	7440-23-5	105 J	41.1	110	1
07968	Strontium	7440-24-6	23.5	0.0682	0.550	1
06969	Tin	7440-31-5	2.79 J	1.10	11.0	1
06970	Titanium	7440-32-6	1,210	0.418	1.10	1
10146	Zirconium	7440-67-7	1.96 J	0.925	5.50	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.235	0.0667	0.222	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	10.7	0.0667	0.445	2
06126	Barium	7440-39-3	161	0.120	0.445	2
06127	Beryllium	7440-41-7	0.922	0.0178	0.111	2
06128	Cadmium	7440-43-9	0.562	0.0400	0.111	2
06131	Chromium	7440-47-3	32.2	0.133	0.445	2
06132	Cobalt	7440-48-4	8.98	0.0222	0.111	2
06133	Copper	7440-50-8	16.4	0.0734	0.445	2
06135	Lead	7439-92-1	21.2	0.0116	0.222	2
06138	Molybdenum	7439-98-7	1.12	0.0556	0.111	2
06139	Nickel	7440-02-0	19.9	0.111	0.445	2
06141	Selenium	7782-49-2	0.132 J	0.0445	0.445	2
06142	Silver	7440-22-4	0.249	0.0133	0.111	2
06145	Thallium	7440-28-0	0.446	0.0333	0.111	2
06148	Vanadium	7440-62-2	57.4	0.0245	0.111	2
06149	Zinc	7440-66-6	127	0.622	3.33	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0119 J	0.0032	0.110	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	0.91	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	34.0	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.9	0.23	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	451	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL169 SDG#: DE042-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.		mV	mV	mV	
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.82	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	11.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 16:39	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 20:52	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 02:49	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 20:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 01:16	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL169 SDG#: DE042-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
0145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:07	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:07	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:29	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 10:43	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 01:33	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 17:06	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL172 SDG#: DE042-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1
04688	Phenol	108-95-2	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL172 SDG#: DE042-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	1.4 J	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	1.5 J	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	3.7	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.1 J	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	1.1 J	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4 U	6.4	19	1
10138	Chrysene	218-01-9	3.2	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71 U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	14 J	6.4	19	1
10138	Fluoranthene	206-44-0	6.0	0.71	1.8	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.82 J	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.86 J	0.71	1.8	1
10138	Naphthalene	91-20-3	0.94 J	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19	1
10138	Phenanthrene	85-01-8	3.8	0.71	1.8	1
10138	Pyrene	129-00-0	4.2	0.71	1.8	1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.5	1
10401	2,4-DB	94-82-6	0.66 U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.64 U	0.64	1.3	1
10401	Dinoseb	88-85-7	0.85 U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85 U	0.85	1.8	1
10401	MCPA	94-74-6	280	81	260	1
10401	MCPP (Mecoprop)	93-65-2	79 U	79	260	1
10401	2,4,5-T	93-76-5	0.087 U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.31 U	0.31	0.31	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL172 SDG#: DE042-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.090 J	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 J	0.036	0.18	1
01363	Chlordane	57-74-9	2.9 U	2.9	3.6	1
01363	p,p-DDD	72-54-8	0.15 U	0.15	0.36	1
01363	p,p-DDE	72-55-9	0.26 U	0.26	0.36	1
01363	p,p-DDT	50-29-3	0.32 U	0.32	0.36	1
01363	Delta BHC	319-86-8	0.15 J	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.073 U	0.073	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.35 U	0.35	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.13 U	0.13	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.052 U	0.052	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	2.1 J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	2.0	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.92 J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,800	5.33	21.2	1
07914	Boron	7440-42-8	4.12 J	0.943	5.30	1
01650	Calcium	7440-70-2	2,300	6.49	21.2	1
01654	Iron	7439-89-6	18,900	4.99	21.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL172 SDG#: DE042-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	18.7	0.23	2.1	1
01657	Magnesium	7439-95-4	3,600	2.69	10.6	1
06958	Manganese	7439-96-5	271	0.0826	0.530	1
10145	Phosphorus	7723-14-0	309	0.593	10.6	1
01662	Potassium	7440-09-7	3,250	19.1	53.0	1
01667	Sodium	7440-23-5	72.7 J	39.5	106	1
07968	Strontium	7440-24-6	21.5	0.0657	0.530	1
06969	Tin	7440-31-5	2.29 J	1.06	10.6	1
06970	Titanium	7440-32-6	1,180	0.403	1.06	1
10146	Zirconium	7440-67-7	1.11 J	0.890	5.30	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.213	0.0636	0.212	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	12.2	0.0636	0.424	2
06126	Barium	7440-39-3	158	0.114	0.424	2
06127	Beryllium	7440-41-7	0.925	0.0169	0.106	2
06128	Cadmium	7440-43-9	0.326	0.0381	0.106	2
06131	Chromium	7440-47-3	32.1	0.127	0.424	2
06132	Cobalt	7440-48-4	8.47	0.0212	0.106	2
06133	Copper	7440-50-8	13.8	0.0699	0.424	2
06135	Lead	7439-92-1	18.6	0.0110	0.212	2
06138	Molybdenum	7439-98-7	1.13	0.0530	0.106	2
06139	Nickel	7440-02-0	19.3	0.106	0.424	2
06141	Selenium	7782-49-2	0.119 J	0.0424	0.424	2
06142	Silver	7440-22-4	0.0762 J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.442	0.0318	0.106	2
06148	Vanadium	7440-62-2	55.2	0.0233	0.106	2
06149	Zinc	7440-66-6	84.3	0.593	3.18	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0029 U	0.0029	0.101	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.95 J	0.85	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	482	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL172 SDG#: DE042-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.02	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.6	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 17:08	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 21:25	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 03:17	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 20:49	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 01:34	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL172 SDG#: DE042-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
0145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:10	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:30	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 10:58	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 01:56	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 17:38	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL173 SDG#: DE042-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	49	J 18	360	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL173 SDG#: DE042-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18	U 18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	1.6	J 0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.94	J 0.36	1.8	1
10138	Anthracene	120-12-7	1.4	J 0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	4.1	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	7.3	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	20	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	11	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	5.5	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U 6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U 6.4	19	1
10138	Chrysene	218-01-9	12	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.6	J 0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19	1
10138	Fluoranthene	206-44-0	31	0.71	1.8	1
10138	Fluorene	86-73-7	1.3	J 0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	11	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	2.4	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	3.1	0.71	1.8	1
10138	Naphthalene	91-20-3	2.4	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U 0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U 6.4	19	1
10138	Phenanthrene	85-01-8	22	0.71	1.8	1
10138	Pyrene	129-00-0	19	0.71	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3	U 1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U 4.7	9.6	1
10401	2,4-DB	94-82-6	22	U 22	22	1
10401	Dicamba	1918-00-9	0.50	U 0.50	1.3	1
10401	Dinoseb	88-85-7	0.85	U 0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	7.0	0.85	1.8	1
10401	MCPA	94-74-6	220	U 220	270	1
10401	MCPP (Mecoprop)	93-65-2	180	U 180	270	1
10401	2,4,5-T	93-76-5	0.087	U 0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U 0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL173 SDG#: DE042-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.16 U	0.16	0.36	1
01363	p,p-DDE	72-55-9	0.45 U	0.45	0.45	1
01363	p,p-DDT	50-29-3	0.47 U	0.47	0.47	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.12 U	0.12	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.12 U	0.12	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.17 U	0.17	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.077 U	0.077	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	3.8	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35 U	0.35	1.8	1
10225	PCB-1260	11096-82-5	3.7	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,700	5.21	20.7	1
07914	Boron	7440-42-8	3.94 J	0.921	5.18	1
01650	Calcium	7440-70-2	2,350	6.34	20.7	1
01654	Iron	7439-89-6	18,400	4.88	20.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL173 SDG#: DE042-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	18.9	0.23	2.1	1
01657	Magnesium	7439-95-4	3,560	2.63	10.4	1
06958	Manganese	7439-96-5	307	0.0807	0.518	1
10145	Phosphorus	7723-14-0	290	0.580	10.4	1
01662	Potassium	7440-09-7	3,340	18.6	51.8	1
01667	Sodium	7440-23-5	79.3 J	38.6	104	1
07968	Strontium	7440-24-6	20.8	0.0642	0.518	1
06969	Tin	7440-31-5	2.36 J	1.04	10.4	1
06970	Titanium	7440-32-6	1,140	0.393	1.04	1
10146	Zirconium	7440-67-7	1.53 J	0.869	5.18	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.216	0.0615	0.205	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	11.2	0.0615	0.410	2
06126	Barium	7440-39-3	155	0.111	0.410	2
06127	Beryllium	7440-41-7	0.893	0.0164	0.103	2
06128	Cadmium	7440-43-9	0.345	0.0369	0.103	2
06131	Chromium	7440-47-3	30.0	0.123	0.410	2
06132	Cobalt	7440-48-4	8.40	0.0205	0.103	2
06133	Copper	7440-50-8	13.6	0.0677	0.410	2
06135	Lead	7439-92-1	16.3	0.0107	0.205	2
06138	Molybdenum	7439-98-7	1.16	0.0513	0.103	2
06139	Nickel	7440-02-0	18.7	0.103	0.410	2
06141	Selenium	7782-49-2	0.118 J	0.0410	0.410	2
06142	Silver	7440-22-4	0.0930 J	0.0123	0.103	2
06145	Thallium	7440-28-0	0.448	0.0308	0.103	2
06148	Vanadium	7440-62-2	53.7	0.0226	0.103	2
06149	Zinc	7440-66-6	99.2	0.574	3.08	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0053 J	0.0028	0.0986	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7	0.85	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.0	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.40 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	476	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL173 SDG#: DE042-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.		mV	mV	mV	
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.67	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 17:37	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 21:58	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 03:44	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 21:04	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 01:53	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL173 SDG#: DE042-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01645	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:21	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:34	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 11:12	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 02:19	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 17:54	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL176 SDG#: DE042-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	70	U 70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	70	U 70	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1
04688	Phenol	108-95-2	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL176 SDG#: DE042-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	7.3	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	14	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	65	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	49	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	87	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	17	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	35	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3 U	6.3	19	1
10138	Chrysene	218-01-9	73	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	6.0	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.3 U	6.3	19	1
10138	Fluoranthene	206-44-0	180	0.70	1.8	1
10138	Fluorene	86-73-7	5.7	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	18	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.95 J	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.0 J	0.70	1.8	1
10138	Naphthalene	91-20-3	1.4 J	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	100	0.70	1.8	1
10138	Pyrene	129-00-0	130	0.70	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.5	1
10401	2,4-DB	94-82-6	0.65 U	0.65	1.8	1
10401	Dicamba	1918-00-9	0.55 U	0.55	1.3	1
10401	Dinoseb	88-85-7	0.84 U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.4 J	0.84	1.8	1
10401	MCPA	94-74-6	290 U	290	290	1
10401	MCPP (Mecoprop)	93-65-2	430 U	430	430	1
10401	2,4,5-T	93-76-5	0.30 U	0.30	0.30	1
10401	2,4,5-TP	93-72-1	0.079 U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL176 SDG#: DE042-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.35 U	0.35	0.87	5
01363	Alpha BHC	319-84-6	0.18 U	0.18	0.87	5
01363	Beta BHC	319-85-7	0.32 U	0.32	0.87	5
01363	Gamma BHC - Lindane	58-89-9	0.18 U	0.18	0.87	5
01363	Chlordane	57-74-9	4.2 U	4.2	18	5
01363	p,p-DDD	72-54-8	3.5 U	3.5	3.5	5
01363	p,p-DDE	72-55-9	6.9 U	6.9	36	100
01363	p,p-DDT	50-29-3	0.35 U	0.35	1.8	5
01363	Delta BHC	319-86-8	0.19 U	0.19	0.87	5
01363	Dieldrin	60-57-1	5.7 U	5.7	5.7	5
01363	Endosulfan I	959-98-8	0.23 U	0.23	0.87	5
01363	Endosulfan II	33213-65-9	8.3 U	8.3	8.3	5
01363	Endosulfan Sulfate	1031-07-8	0.35 U	0.35	1.8	5
01363	Endrin	72-20-8	0.35 U	0.35	1.8	5
01363	Endrin Aldehyde	7421-93-4	6.8 U	6.8	6.8	5
01363	Endrin Ketone	53494-70-5	0.35 U	0.35	1.8	5
01363	Heptachlor	76-44-8	0.46 J	0.32	0.87	5
01363	Heptachlor Epoxide	1024-57-3	7.6 U	7.6	17	100
01363	Methoxychlor	72-43-5	24 U	24	24	5
01363	Mirex	2385-85-5	8.1 U	8.1	8.1	5
01363	Toxaphene	8001-35-2	12 U	12	35	5
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	260 U	260	870	250
10225	Aroclor 5442	12642-23-8	260 U	260	870	250
10225	Aroclor 5460	11126-42-4	260 U	260	870	250
10225	PCB-1016	12674-11-2	87 U	87	450	250
10225	PCB-1221	11104-28-2	130 U	130	450	250
10225	PCB-1232	11141-16-5	140 U	140	450	250
10225	PCB-1242	53469-21-9	130 U	130	450	250
10225	PCB-1248	12672-29-6	87 U	87	450	250
10225	PCB-1254	11097-69-1	2,900	87	450	250
10225	PCB-1260	11096-82-5	87 U	87	450	250
10225	PCB-1262	37324-23-5	87 U	87	450	250
10225	PCB-1268	11100-14-4	87 U	87	450	250
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,600	5.04	20.0	1
07914	Boron	7440-42-8	3.62 J	0.891	5.01	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL176 SDG#: DE042-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	7,210	6.14	20.0	1
01654	Iron	7439-89-6	19,600	4.72	20.0	1
01656	Lithium	7439-93-2	13.7	0.22	2.0	1
01657	Magnesium	7439-95-4	3,710	2.54	10.0	1
06958	Manganese	7439-96-5	294	0.0781	0.501	1
10145	Phosphorus	7723-14-0	522	0.561	10.0	1
01662	Potassium	7440-09-7	3,470	18.0	50.1	1
01667	Sodium	7440-23-5	114	37.4	100	1
07968	Strontium	7440-24-6	20.3	0.0621	0.501	1
06969	Tin	7440-31-5	2.12 J	1.00	10.0	1
06970	Titanium	7440-32-6	1,200	0.381	1.00	1
10146	Zirconium	7440-67-7	1.27 J	0.841	5.01	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.192 J	0.0631	0.210	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.93	0.0631	0.421	2
06126	Barium	7440-39-3	169	0.114	0.421	2
06127	Beryllium	7440-41-7	0.495	0.0168	0.105	2
06128	Cadmium	7440-43-9	0.506	0.0379	0.105	2
06131	Chromium	7440-47-3	20.5	0.126	0.421	2
06132	Cobalt	7440-48-4	7.07	0.0210	0.105	2
06133	Copper	7440-50-8	13.2	0.0694	0.421	2
06135	Lead	7439-92-1	37.6	0.0109	0.210	2
06138	Molybdenum	7439-98-7	0.811	0.0526	0.105	2
06139	Nickel	7440-02-0	12.5	0.105	0.421	2
06141	Selenium	7782-49-2	0.0667 J	0.0421	0.421	2
06142	Silver	7440-22-4	0.123	0.0126	0.105	2
06145	Thallium	7440-28-0	0.314	0.0315	0.105	2
06148	Vanadium	7440-62-2	53.2	0.0231	0.105	2
06149	Zinc	7440-66-6	110	0.589	3.15	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0109 J	0.0030	0.104	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	0.84	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.5	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.90 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	

*=This limit was used in the evaluation of the final result

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL176 SDG#: DE042-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	405	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.84	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	4.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 18:07	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 22:30	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 04:12	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 21:34	Jamie L Brillhart	5
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/26/2011 14:58	Jamie L Brillhart	100
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 02:11	Lindsey K Lafferty	250
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL176 SDG#: DE042-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:24	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:35	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 08:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 03:05	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 18:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL178 SDG#: DE042-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U 210	640	1
04688	Benzidine	92-87-5	1,500	U 1,500	4,300	1
04688	Benzoic acid	65-85-0	210	U 210	640	1
04688	Benzyl alcohol	100-51-6	210	U 210	640	1
04688	4-Bromophenyl-phenylether	101-55-3	21	U 21	210	1
04688	Carbazole	86-74-8	21	U 21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	43	U 43	210	1
04688	4-Chloroaniline	106-47-8	86	U 86	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U 21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U 21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U 21	210	1
04688	2-Chloronaphthalene	91-58-7	21	U 21	210	1
04688	2-Chlorophenol	95-57-8	21	U 21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	43	U 43	210	1
04688	Dibenzofuran	132-64-9	21	U 21	210	1
04688	1,2-Dichlorobenzene	95-50-1	21	U 21	210	1
04688	1,3-Dichlorobenzene	541-73-1	21	U 21	210	1
04688	1,4-Dichlorobenzene	106-46-7	21	U 21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U 130	430	1
04688	2,4-Dichlorophenol	120-83-2	21	U 21	210	1
04688	2,4-Dimethylphenol	105-67-9	43	U 43	210	1
04688	3,5-Dimethylphenol	108-68-9	43	U 43	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U 210	640	1
04688	2,4-Dinitrophenol	51-28-5	860	U 860	2,600	1
04688	2,4-Dinitrotoluene	121-14-2	43	U 43	210	1
04688	2,6-Dinitrotoluene	606-20-2	21	U 21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	21	U 21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	43	J 21	430	1
04688	Hexachlorobenzene	118-74-1	21	U 21	210	1
04688	Hexachlorobutadiene	87-68-3	86	U 86	210	1
04688	Hexachlorocyclopentadiene	77-47-4	210	U 210	640	1
04688	Hexachloroethane	67-72-1	21	U 21	210	1
04688	Isophorone	78-59-1	21	U 21	210	1
04688	2-Methylphenol	95-48-7	43	U 43	210	1
04688	4-Methylphenol	106-44-5	43	U 43	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	21	U 21	210	1
04688	3-Nitroaniline	99-09-2	43	U 43	210	1
04688	4-Nitroaniline	100-01-6	86	U 86	210	1
04688	Nitrobenzene	98-95-3	21	U 21	210	1
04688	2-Nitrophenol	88-75-5	21	U 21	210	1
04688	4-Nitrophenol	100-02-7	210	U 210	640	1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U 21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	21	U 21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	210	U 210	640	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL178 SDG#: DE042-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	21 U	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	21 U	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	43 U	43	210	1
04688	2,4,6-Trichlorophenol	88-06-2	43 U	43	210	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.86 U	0.86	2.1	1
10138	Acenaphthylene	208-96-8	0.43 U	0.43	2.1	1
10138	Anthracene	120-12-7	0.87 J	0.43	2.1	1
10138	Benzo(a)anthracene	56-55-3	6.8	0.86	2.1	1
10138	Benzo(a)pyrene	50-32-8	7.9	0.86	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	15	0.86	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	3.5	0.86	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	5.5	0.86	2.1	1
10138	Butylbenzylphthalate	85-68-7	8.8 J	7.7	23	1
10138	Di-n-butylphthalate	84-74-2	7.7 U	7.7	23	1
10138	Chrysene	218-01-9	14	0.43	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	1.2 J	0.86	2.1	1
10138	Diethylphthalate	84-66-2	7.7 U	7.7	23	1
10138	Dimethylphthalate	131-11-3	7.7 U	7.7	23	1
10138	Fluoranthene	206-44-0	14	0.86	2.1	1
10138	Fluorene	86-73-7	0.86 U	0.86	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.2	0.86	2.1	1
10138	1-Methylnaphthalene	90-12-0	0.86 J	0.86	2.1	1
10138	2-Methylnaphthalene	91-57-6	1.3 J	0.86	2.1	1
10138	Naphthalene	91-20-3	1.2 J	0.86	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	0.86 U	0.86	2.1	1
10138	Di-n-octylphthalate	117-84-0	23 J	7.7	23	1
10138	Phenanthrene	85-01-8	5.9	0.86	2.1	1
10138	Pyrene	129-00-0	12	0.86	2.1	1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	2.6 U	2.6	4.6	1
10401	Dalapon	75-99-0	5.6 U	5.6	12	1
10401	2,4-DB	94-82-6	21	0.80	2.2	1
10401	Dicamba	1918-00-9	0.55 J	0.51	1.5	1
10401	Dinoseb	88-85-7	1.0 U	1.0	3.1	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0 U	1.0	2.2	1
10401	MCPA	94-74-6	400	98	320	1
10401	MCPP (Mecoprop)	93-65-2	96 U	96	320	1
10401	2,4,5-T	93-76-5	0.74	0.11	0.22	1
10401	2,4,5-TP	93-72-1	0.096 U	0.096	0.22	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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CDM Federal Programs Corp.
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Suite 210
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Submitted: 12/17/2010 09:40

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SL178 SDG#: DE042-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.85 U	0.85	2.1	10
01363	Alpha BHC	319-84-6	0.44 U	0.44	2.1	10
01363	Beta BHC	319-85-7	2.1 J	0.77	2.1	10
01363	Gamma BHC - Lindane	58-89-9	0.44 U	0.44	2.1	10
01363	Chlordane	57-74-9	22 U	22	44	10
01363	p,p-DDD	72-54-8	2.2 U	2.2	4.4	10
01363	p,p-DDE	72-55-9	2.8 U	2.8	4.4	10
01363	p,p-DDT	50-29-3	5.1 U	5.1	5.1	10
01363	Delta BHC	319-86-8	0.46 U	0.46	2.1	10
01363	Dieldrin	60-57-1	0.95 U	0.95	4.4	10
01363	Endosulfan I	959-98-8	0.56 U	0.56	2.1	10
01363	Endosulfan II	33213-65-9	2.8 U	2.8	4.4	10
01363	Endosulfan Sulfate	1031-07-8	3.5 U	3.5	4.4	10
01363	Endrin	72-20-8	0.85 U	0.85	4.4	10
01363	Endrin Aldehyde	7421-93-4	3.8 U	3.8	4.4	10
01363	Endrin Ketone	53494-70-5	0.85 U	0.85	4.4	10
01363	Heptachlor	76-44-8	0.77 U	0.77	2.1	10
01363	Heptachlor Epoxide	1024-57-3	1.7 U	1.7	2.1	10
01363	Methoxychlor	72-43-5	4.4 U	4.4	21	10
01363	Mirex	2385-85-5	0.85 U	0.85	4.4	10
01363	Toxaphene	8001-35-2	28 U	28	85	10
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	13 U	13	42	10
10225	Aroclor 5442	12642-23-8	13 U	13	42	10
10225	Aroclor 5460	11126-42-4	54	13	42	10
10225	PCB-1016	12674-11-2	4.2 U	4.2	22	10
10225	PCB-1221	11104-28-2	6.4 U	6.4	22	10
10225	PCB-1232	11141-16-5	6.7 U	6.7	22	10
10225	PCB-1242	53469-21-9	6.4 U	6.4	22	10
10225	PCB-1248	12672-29-6	4.2 U	4.2	22	10
10225	PCB-1254	11097-69-1	51	4.2	22	10
10225	PCB-1260	11096-82-5	61	4.2	22	10
10225	PCB-1262	37324-23-5	4.2 U	4.2	22	10
10225	PCB-1268	11100-14-4	4.2 U	4.2	22	10
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	21,300	6.27	24.9	1
07914	Boron	7440-42-8	5.32 J	1.11	6.23	1

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Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
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SL178 SDG#: DE042-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	4,530	7.64	24.9	1
01654	Iron	7439-89-6	26,000	5.87	24.9	1
01656	Lithium	7439-93-2	27.2	0.27	2.5	1
01657	Magnesium	7439-95-4	5,300	3.17	12.5	1
06958	Manganese	7439-96-5	395	0.0972	0.623	1
10145	Phosphorus	7723-14-0	500	0.698	12.5	1
01662	Potassium	7440-09-7	3,930	22.4	62.3	1
01667	Sodium	7440-23-5	129	46.5	125	1
07968	Strontium	7440-24-6	28.4	0.0773	0.623	1
06969	Tin	7440-31-5	3.39 J	1.25	12.5	1
06970	Titanium	7440-32-6	1,480	0.474	1.25	1
10146	Zirconium	7440-67-7	1.36 J	1.05	6.23	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.533	0.0763	0.254	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	8.88	0.0763	0.508	2
06126	Barium	7440-39-3	202	0.137	0.508	2
06127	Beryllium	7440-41-7	1.03	0.0203	0.127	2
06128	Cadmium	7440-43-9	2.39	0.0458	0.127	2
06131	Chromium	7440-47-3	54.6	0.153	0.508	2
06132	Cobalt	7440-48-4	13.1	0.0254	0.127	2
06133	Copper	7440-50-8	32.0	0.0839	0.508	2
06135	Lead	7439-92-1	101	0.0132	0.254	2
06138	Molybdenum	7439-98-7	2.46	0.0635	0.127	2
06139	Nickel	7440-02-0	35.0	0.127	0.508	2
06141	Selenium	7782-49-2	0.183 J	0.0508	0.508	2
06142	Silver	7440-22-4	1.90	0.0153	0.127	2
06145	Thallium	7440-28-0	0.503	0.0381	0.127	2
06148	Vanadium	7440-62-2	69.8	0.0280	0.127	2
06149	Zinc	7440-66-6	474	1.78	9.53	5
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.197	0.0035	0.124	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	1.0	1.3	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.6 U	11.6	38.5	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.9	0.26	1.3	1
	ASTM D1498		mV	mV	mV	

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Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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SL178 SDG#: DE042-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	438	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.36	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	22.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 18:36	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 23:02	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 05:35	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 21:48	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 03:44	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1

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Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
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SL178 SDG#: DE042-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:26	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	01/04/2011 13:57	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:36	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 12:09	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 04:37	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 18:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL186 SDG#: DE042-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	72	U 72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	45	J 18	360	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	72	U 72	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	540	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL186 SDG#: DE042-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36 U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36 U	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72 U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.94 J	0.36	1.8	1
10138	Anthracene	120-12-7	2.8	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	17	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	13	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	29	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	5.3	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	8.4	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4 U	6.4	19	1
10138	Chrysene	218-01-9	26	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.6 J	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Fluoranthene	206-44-0	33	0.72	1.8	1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	4.4	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	1.3 J	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.6 J	0.72	1.8	1
10138	Naphthalene	91-20-3	1.8	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19	1
10138	Phenanthrene	85-01-8	8.1	0.72	1.8	1
10138	Pyrene	129-00-0	29	0.72	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.7	1
10401	2,4-DB	94-82-6	0.67 U	0.67	1.8	1
10401	Dicamba	1918-00-9	0.43 U	0.43	1.3	1
10401	Dinoseb	88-85-7	2.7 U	2.7	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86 U	0.86	1.8	1
10401	MCPA	94-74-6	290 U	290	290	1
10401	MCPP (Mecoprop)	93-65-2	81 U	81	270	1
10401	2,4,5-T	93-76-5	0.088 U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.31	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL186 SDG#: DE042-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.071 U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.080 J	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037 U	0.037	0.18	1
01363	Chlordane	57-74-9	0.86 U	0.86	3.7	1
01363	p,p-DDD	72-54-8	0.071 U	0.071	0.37	1
01363	p,p-DDE	72-55-9	0.31 U	0.31	0.37	1
01363	p,p-DDT	50-29-3	0.48 U	0.48	0.48	1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.071 U	0.071	0.37	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.071 U	0.071	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.071 U	0.071	0.37	1
01363	Endrin	72-20-8	0.071 U	0.071	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.071 U	0.071	0.37	1
01363	Endrin Ketone	53494-70-5	0.071 U	0.071	0.37	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.15 U	0.15	0.18	1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8	1
01363	Mirex	2385-85-5	0.071 U	0.071	0.37	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.1	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.1 U	2.1	7.1	2
10225	Aroclor 5442	12642-23-8	2.1 U	2.1	7.1	2
10225	Aroclor 5460	11126-42-4	5.0 J	2.1	7.1	2
10225	PCB-1016	12674-11-2	0.71 U	0.71	3.7	2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.7	2
10225	PCB-1232	11141-16-5	1.1 U	1.1	3.7	2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.7	2
10225	PCB-1248	12672-29-6	0.71 U	0.71	3.7	2
10225	PCB-1254	11097-69-1	3.0 J	0.71	3.7	2
10225	PCB-1260	11096-82-5	1.1 J	0.71	3.7	2
10225	PCB-1262	37324-23-5	0.71 U	0.71	3.7	2
10225	PCB-1268	11100-14-4	0.71 U	0.71	3.7	2
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,400	5.30	21.1	1
07914	Boron	7440-42-8	4.32 J	0.937	5.27	1
01650	Calcium	7440-70-2	2,840	6.46	21.1	1
01654	Iron	7439-89-6	21,200	4.96	21.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL186 SDG#: DE042-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	24.6	0.23	2.1	1
01657	Magnesium	7439-95-4	4,250	2.67	10.5	1
06958	Manganese	7439-96-5	311	0.0821	0.527	1
10145	Phosphorus	7723-14-0	273	0.590	10.5	1
01662	Potassium	7440-09-7	2,940	19.0	52.7	1
01667	Sodium	7440-23-5	104 J	39.3	105	1
07968	Strontium	7440-24-6	23.7	0.0653	0.527	1
06969	Tin	7440-31-5	2.43 J	1.05	10.5	1
06970	Titanium	7440-32-6	1,270	0.400	1.05	1
10146	Zirconium	7440-67-7	1.98 J	0.885	5.27	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.222	0.0614	0.205	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	16.4	0.0614	0.409	2
06126	Barium	7440-39-3	177	0.110	0.409	2
06127	Beryllium	7440-41-7	0.995	0.0164	0.102	2
06128	Cadmium	7440-43-9	0.283	0.0368	0.102	2
06131	Chromium	7440-47-3	34.6	0.123	0.409	2
06132	Cobalt	7440-48-4	9.10	0.0205	0.102	2
06133	Copper	7440-50-8	14.7	0.0675	0.409	2
06135	Lead	7439-92-1	27.1	0.0106	0.205	2
06138	Molybdenum	7439-98-7	1.08	0.0511	0.102	2
06139	Nickel	7440-02-0	21.2	0.102	0.409	2
06141	Selenium	7782-49-2	0.109 J	0.0409	0.409	2
06142	Silver	7440-22-4	0.119	0.0123	0.102	2
06145	Thallium	7440-28-0	0.426	0.0307	0.102	2
06148	Vanadium	7440-62-2	58.8	0.0225	0.102	2
06149	Zinc	7440-66-6	96.3	0.573	3.07	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0212 J	0.0029	0.102	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.5	0.86	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.2	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.88 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	458	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

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14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL186 SDG#: DE042-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.51	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 19:05	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 09:25	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 06:02	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 23:42	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 04:02	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

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Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL186 SDG#: DE042-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:23	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:23	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:28	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:37	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 12:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 05:00	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 18:42	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL187 SDG#: DE042-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	81	J 18	350	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL187 SDG#: DE042-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71 U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71 U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71 U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71 U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71 U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4 U	6.4	19	1
10138	Chrysene	218-01-9	0.35 U	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71 U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Fluoranthene	206-44-0	0.71 U	0.71	1.8	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71 U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	2.1	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	2.7	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71 U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19	1
10138	Phenanthrene	85-01-8	0.71 U	0.71	1.8	1
10138	Pyrene	129-00-0	0.71 U	0.71	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.5	1
10401	2,4-DB	94-82-6	0.66 U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.52 J	0.42	1.3	1
10401	Dinoseb	88-85-7	0.85 U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85 U	0.85	1.8	1
10401	MCPA	94-74-6	910	81	260	1
10401	MCPP (Mecoprop)	93-65-2	590 U	590	590	1
10401	2,4,5-T	93-76-5	0.087 U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.13 U	0.13	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL187 SDG#: DE042-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.095 U	0.095	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.066 U	0.066	0.18	1
01363	Chlordane	57-74-9	3.4 U	3.4	3.6	1
01363	p,p-DDD	72-54-8	0.37	0.26	0.36	1
01363	p,p-DDE	72-55-9	0.43 U	0.43	0.43	1
01363	p,p-DDT	50-29-3	0.54 U	0.54	0.54	1
01363	Delta BHC	319-86-8	0.43	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.32 U	0.32	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.074 U	0.074	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.34 U	0.34	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	5.6	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	5.2	0.35	1.8	1
10225	PCB-1260	11096-82-5	4.3	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,600	5.28	21.0	1
07914	Boron	7440-42-8	3.97 J	0.933	5.24	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

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Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL187 SDG#: DE042-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	3,620	6.43	21.0	1
01654	Iron	7439-89-6	17,200	4.94	21.0	1
01656	Lithium	7439-93-2	18.3	0.23	2.1	1
01657	Magnesium	7439-95-4	3,790	2.66	10.5	1
06958	Manganese	7439-96-5	288	0.0818	0.524	1
10145	Phosphorus	7723-14-0	279	0.587	10.5	1
01662	Potassium	7440-09-7	2,560	18.9	52.4	1
01667	Sodium	7440-23-5	110	39.1	105	1
07968	Strontium	7440-24-6	20.6	0.0650	0.524	1
06969	Tin	7440-31-5	2.27 J	1.05	10.5	1
06970	Titanium	7440-32-6	1,120	0.399	1.05	1
10146	Zirconium	7440-67-7	2.18 J	0.881	5.24	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.188 J	0.0636	0.212	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	8.93	0.0636	0.424	2
06126	Barium	7440-39-3	148	0.114	0.424	2
06127	Beryllium	7440-41-7	0.866	0.0169	0.106	2
06128	Cadmium	7440-43-9	0.356	0.0381	0.106	2
06131	Chromium	7440-47-3	32.7	0.127	0.424	2
06132	Cobalt	7440-48-4	9.70	0.0212	0.106	2
06133	Copper	7440-50-8	13.7	0.0699	0.424	2
06135	Lead	7439-92-1	19.9	0.0110	0.212	2
06138	Molybdenum	7439-98-7	1.26	0.0530	0.106	2
06139	Nickel	7440-02-0	22.2	0.106	0.424	2
06141	Selenium	7782-49-2	0.117 J	0.0424	0.424	2
06142	Silver	7440-22-4	0.0889 J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.408	0.0318	0.106	2
06148	Vanadium	7440-62-2	53.1	0.0233	0.106	2
06149	Zinc	7440-66-6	89.3	0.593	3.18	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0130 J	0.0030	0.104	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.4	0.85	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.69 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

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14420 Albemarle Point Place
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Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL187 SDG#: DE042-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	434	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.78	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	5.6	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 19:34	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 00:07	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 06:30	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 23:57	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 04:21	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL187 SDG#: DE042-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:32	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:32	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:39	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 12:37	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 05:23	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 18:58	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	72	U 72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	72	U 72	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	540	1
04688	Phenol	108-95-2	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36 U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36 U	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72 U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36 U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.72 U	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.72 U	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.85 J	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.72 U	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.72 U	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4 U	6.4	19	1
10138	Chrysene	218-01-9	0.96 J	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.4 U	6.4	19	1
10138	Fluoranthene	206-44-0	0.72 U	0.72	1.8	1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72 U	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19	1
10138	Phenanthrene	85-01-8	0.72 U	0.72	1.8	1
10138	Pyrene	129-00-0	0.72 U	0.72	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.7	1
10401	2,4-DB	94-82-6	0.67 U	0.67	1.8	1
10401	Dicamba	1918-00-9	0.49 J	0.43	1.3	1
10401	Dinoseb	88-85-7	0.86 U	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86 U	0.86	1.8	1
10401	MCPA	94-74-6	82 U	82	270	1
10401	MCPP (Mecoprop)	93-65-2	610 U	610	610	1
10401	2,4,5-T	93-76-5	0.088 U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.081 U	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.071 U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.037 U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037 U	0.037	0.18	1
01363	Chlordane	57-74-9	0.86 U	0.86	3.7	1
01363	p,p-DDD	72-54-8	0.17 U	0.17	0.37	1
01363	p,p-DDE	72-55-9	0.34 U	0.34	0.37	1
01363	p,p-DDT	50-29-3	0.071 U	0.071	0.37	1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.13 U	0.13	0.37	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.071 U	0.071	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.071 U	0.071	0.37	1
01363	Endrin	72-20-8	0.071 U	0.071	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.14 U	0.14	0.37	1
01363	Endrin Ketone	53494-70-5	0.071 U	0.071	0.37	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037 U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37 U	0.37	1.8	1
01363	Mirex	2385-85-5	0.071 U	0.071	0.37	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.1	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	2.7 J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56 U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	1.3 J	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.86 J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,300	5.15	20.5	1
07914	Boron	7440-42-8	4.10 J	0.910	5.11	1
01650	Calcium	7440-70-2	3,120	6.27	20.5	1
01654	Iron	7439-89-6	18,700	4.82	20.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	16.5	0.23	2.0	1
01657	Magnesium	7439-95-4	3,360	2.60	10.2	1
06958	Manganese	7439-96-5	340	0.0798	0.511	1
10145	Phosphorus	7723-14-0	242	0.573	10.2	1
01662	Potassium	7440-09-7	2,860	18.4	51.1	1
01667	Sodium	7440-23-5	91.0 J	38.2	102	1
07968	Strontium	7440-24-6	22.9	0.0634	0.511	1
06969	Tin	7440-31-5	2.31 J	1.02	10.2	1
06970	Titanium	7440-32-6	1,170	0.389	1.02	1
10146	Zirconium	7440-67-7	2.16 J	0.859	5.11	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.212 J	0.0644	0.215	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.46	0.0644	0.430	2
06126	Barium	7440-39-3	119	0.116	0.430	2
06127	Beryllium	7440-41-7	0.632	0.0172	0.107	2
06128	Cadmium	7440-43-9	0.230	0.0387	0.107	2
06131	Chromium	7440-47-3	20.4	0.129	0.430	2
06132	Cobalt	7440-48-4	6.54	0.0215	0.107	2
06133	Copper	7440-50-8	10.8	0.0709	0.430	2
06135	Lead	7439-92-1	13.8	0.0112	0.215	2
06138	Molybdenum	7439-98-7	0.839	0.0537	0.107	2
06139	Nickel	7440-02-0	13.8	0.107	0.430	2
06141	Selenium	7782-49-2	0.143 J	0.0430	0.430	2
06142	Silver	7440-22-4	0.100 J	0.0129	0.107	2
06145	Thallium	7440-28-0	0.358	0.0322	0.107	2
06148	Vanadium	7440-62-2	38.0	0.0236	0.107	2
06149	Zinc	7440-66-6	57.3	0.602	3.22	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.104	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6	0.86	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.2	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.58 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	448	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.		mV	mV	mV	
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.23	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 12:14	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 14:14	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/01/2011 21:47	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 00:27	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 04:39	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:25	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	01/04/2011 12:43	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:25	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 12:43	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:40	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 11:26	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 03:28	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 19:14	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,600	18	180	1
04688	Acenaphthylene	208-96-8	1,600	18	180	1
04688	Aniline	62-53-3	670	180	540	1
04688	Anthracene	120-12-7	1,700	18	180	1
04688	Benziidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzo(a)anthracene	56-55-3	1,600	18	180	1
04688	Benzo(a)pyrene	50-32-8	1,500	18	180	1
04688	Benzo(b)fluoranthene	205-99-2	1,500	18	180	1
04688	Benzo(g,h,i)perylene	191-24-2	1,400	18	180	1
04688	Benzo(k)fluoranthene	207-08-9	1,400	18	180	1
04688	Benzoic acid	65-85-0	800	180	540	1
04688	Benzyl alcohol	100-51-6	1,700	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	1,600	18	180	1
04688	Butylbenzylphthalate	85-68-7	1,500	18	180	1
04688	Di-n-butylphthalate	84-74-2	1,800	18	180	1
04688	Carbazole	86-74-8	1,700	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	1,500	36	180	1
04688	4-Chloroaniline	106-47-8	880	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,500	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,600	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,500	18	180	1
04688	2-Chloronaphthalene	91-58-7	1,300	18	180	1
04688	2-Chlorophenol	95-57-8	1,600	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,600	36	180	1
04688	Chrysene	218-01-9	1,600	18	180	1
04688	Dibenz(a,h)anthracene	53-70-3	1,500	18	180	1
04688	Dibenzofuran	132-64-9	1,600	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	1,500	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	1,500	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	1,500	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	940	110	360	1
04688	2,4-Dichlorophenol	120-83-2	1,600	18	180	1
04688	Diethylphthalate	84-66-2	1,500	18	180	1
04688	2,4-Dimethylphenol	105-67-9	1,500	36	180	1
04688	3,5-Dimethylphenol	108-68-9	1,700	36	180	1
04688	Dimethylphthalate	131-11-3	1,600	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,600	180	540	1
04688	2,4-Dinitrophenol	51-28-5	2,100	J 720	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	1,600	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	1,600	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	1,600	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,700	18	360	1
04688	Fluoranthene	206-44-0	2,000	18	180	1
04688	Fluorene	86-73-7	1,600	18	180	1
04688	Hexachlorobenzene	118-74-1	1,700	18	180	1
04688	Hexachlorobutadiene	87-68-3	1,400	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	3,000	180	540	1
04688	Hexachloroethane	67-72-1	1,400	18	180	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,500	18	180	1
04688	Isophorone	78-59-1	1,500	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,600	18	180	1
04688	2-Methylnaphthalene	91-57-6	1,400	18	180	1
04688	2-Methylphenol	95-48-7	1,600	36	180	1
04688	4-Methylphenol	106-44-5	1,700	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,500	18	180	1
04688	2-Nitroaniline	88-74-4	1,700	18	180	1
04688	3-Nitroaniline	99-09-2	1,400	36	180	1
04688	4-Nitroaniline	100-01-6	1,400	72	180	1
04688	Nitrobenzene	98-95-3	1,400	18	180	1
04688	2-Nitrophenol	88-75-5	1,500	18	180	1
04688	4-Nitrophenol	100-02-7	1,100	180	540	1
04688	N-Nitrosodimethylamine	62-75-9	1,700	36	180	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,500	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	1,600	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,500	18	180	1
04688	Pentachlorophenol	87-86-5	1,500	180	540	1
04688	Phenanthrene	85-01-8	1,600	18	180	1
04688	Phenol	108-95-2	1,600	18	180	1
04688	Pyrene	129-00-0	1,400	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,500	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	1,600	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	1,500	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	30	0.72	1.8	1
10138	Acenaphthylene	208-96-8	31	0.36	1.8	1
10138	Anthracene	120-12-7	33	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	33	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	31	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	41	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	16	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	32	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	37	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	37	6.4	19	1
10138	Chrysene	218-01-9	35	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	19	0.72	1.8	1
10138	Diethylphthalate	84-66-2	29	6.4	19	1
10138	Dimethylphthalate	131-11-3	33	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	60	6.4	19	1
10138	Fluoranthene	206-44-0	38	0.72	1.8	1
10138	Fluorene	86-73-7	33	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	19	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	33	0.72	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	2-Methylnaphthalene	91-57-6	29	0.72	1.8	1
10138	Naphthalene	91-20-3	32	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	35	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	46	6.4	19	1
10138	Phenanthrene	85-01-8	35	0.72	1.8	1
10138	Pyrene	129-00-0	34	0.72	1.8	1

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	8.4		1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.7	1
10401	2,4-DB	94-82-6	9.7		0.67	1.8	1
10401	Dicamba	1918-00-9	1.1	J	0.43	1.3	1
10401	Dinoseb	88-85-7	0.98	J	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	10		0.86	1.8	1
10401	MCPA	94-74-6	1,300		82	270	1
10401	MCPP (Mecoprop)	93-65-2	81	U	81	270	1
10401	2,4,5-T	93-76-5	0.74		0.088	0.18	1
10401	2,4,5-TP	93-72-1	1.0		0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs		SW-846 8081A	ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.34		0.071	0.18	1
01363	Alpha BHC	319-84-6	0.39		0.037	0.18	1
01363	Beta BHC	319-85-7	0.28		0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.40		0.037	0.18	1
01363	Chlordane	57-74-9	0.86	U	0.86	3.7	1
01363	p,p-DDD	72-54-8	0.70		0.071	0.37	1
01363	p,p-DDE	72-55-9	0.95		0.071	0.37	1
01363	p,p-DDT	50-29-3	0.82		0.071	0.37	1
01363	Delta BHC	319-86-8	0.26		0.039	0.18	1
01363	Dieldrin	60-57-1	0.55		0.071	0.37	1
01363	Endosulfan I	959-98-8	0.24		0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.75		0.071	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.82		0.071	0.37	1
01363	Endrin	72-20-8	0.57		0.071	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.41		0.071	0.37	1
01363	Endrin Ketone	53494-70-5	0.67		0.071	0.37	1
01363	Heptachlor	76-44-8	0.26		0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.37		0.037	0.18	1
01363	Methoxychlor	72-43-5	2.4		0.37	1.8	1
01363	Mirex	2385-85-5	0.16	J	0.071	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	SW-846 8082	ug/kg	ug/kg	ug/kg	

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	5.3	1.1	3.5	1
10225	PCB-1016	12674-11-2	24	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56 U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	11	0.35	1.8	1
10225	PCB-1260	11096-82-5	26	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,300	5.15	20.5	1
07914	Boron	7440-42-8	194	0.910	5.11	1
01650	Calcium	7440-70-2	3,470	6.27	20.5	1
01654	Iron	7439-89-6	17,800	4.82	20.5	1
01656	Lithium	7439-93-2	119	0.23	2.0	1
01657	Magnesium	7439-95-4	3,680	2.60	10.2	1
06958	Manganese	7439-96-5	371	0.0798	0.511	1
10145	Phosphorus	7723-14-0	307	0.573	10.2	1
01662	Potassium	7440-09-7	4,120	18.4	51.1	1
01667	Sodium	7440-23-5	1,090	38.2	102	1
07968	Strontium	7440-24-6	124	0.0634	0.511	1
06969	Tin	7440-31-5	370	1.02	10.2	1
06970	Titanium	7440-32-6	1,460	0.389	1.02	1
10146	Zirconium	7440-67-7	97.5	0.859	5.11	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.990	0.0632	0.211	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.7	0.0632	0.421	2
06126	Barium	7440-39-3	182	0.114	0.421	2
06127	Beryllium	7440-41-7	2.22	0.0168	0.105	2
06128	Cadmium	7440-43-9	2.14	0.0379	0.105	2
06131	Chromium	7440-47-3	42.8	0.126	0.421	2
06132	Cobalt	7440-48-4	78.9	0.0211	0.105	2
06133	Copper	7440-50-8	27.3	0.0695	0.421	2
06135	Lead	7439-92-1	23.0	0.0110	0.211	2
06138	Molybdenum	7439-98-7	18.6	0.0527	0.105	2
06139	Nickel	7440-02-0	33.0	0.105	0.421	2
06141	Selenium	7782-49-2	2.05	0.0421	0.421	2
06142	Silver	7440-22-4	17.3	0.0126	0.105	2
06145	Thallium	7440-28-0	1.13	0.0316	0.105	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6020	mg/kg	mg/kg	mg/kg	
06148	Vanadium	7440-62-2	68.4	0.0232	0.105	2
06149	Zinc	7440-66-6	94.6	0.590	3.16	2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.195	0.0030	0.106	1
Wet Chemistry						
		EPA 300.0	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.8	0.86	1.1	1
		EPA 314.0	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	524	9.7	32.2	1
		SW-846 7199	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	35.1	1.1	5.4	5
Wet Chemistry						
		EPA 160.3 modified	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 12:43	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 14:47	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/01/2011 22:15	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 00:41	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 04:58	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
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SL189 SDG#: DE042-14MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:34	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:34	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 12:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:42	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 11:54	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 04:14	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 19:30	Ashley M Adams	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,600	18	180	1
04688	Acenaphthylene	208-96-8	1,700	18	180	1
04688	Aniline	62-53-3	470	J 180	540	1
04688	Anthracene	120-12-7	1,600	18	180	1
04688	Benziidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzo(a)anthracene	56-55-3	1,700	18	180	1
04688	Benzo(a)pyrene	50-32-8	1,600	18	180	1
04688	Benzo(b)fluoranthene	205-99-2	1,500	18	180	1
04688	Benzo(g,h,i)perylene	191-24-2	1,400	18	180	1
04688	Benzo(k)fluoranthene	207-08-9	1,500	18	180	1
04688	Benzoic acid	65-85-0	350	J 180	540	1
04688	Benzyl alcohol	100-51-6	1,600	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	1,600	18	180	1
04688	Butylbenzylphthalate	85-68-7	1,500	18	180	1
04688	Di-n-butylphthalate	84-74-2	1,700	18	180	1
04688	Carbazole	86-74-8	1,700	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	1,500	36	180	1
04688	4-Chloroaniline	106-47-8	780	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,500	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,500	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,400	18	180	1
04688	2-Chloronaphthalene	91-58-7	1,300	18	180	1
04688	2-Chlorophenol	95-57-8	1,600	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,700	36	180	1
04688	Chrysene	218-01-9	1,700	18	180	1
04688	Dibenz(a,h)anthracene	53-70-3	1,500	18	180	1
04688	Dibenzofuran	132-64-9	1,700	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	1,500	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	1,500	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	1,500	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	840	110	360	1
04688	2,4-Dichlorophenol	120-83-2	1,600	18	180	1
04688	Diethylphthalate	84-66-2	1,600	18	180	1
04688	2,4-Dimethylphenol	105-67-9	1,300	36	180	1
04688	3,5-Dimethylphenol	108-68-9	1,700	36	180	1
04688	Dimethylphthalate	131-11-3	1,600	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,400	180	540	1
04688	2,4-Dinitrophenol	51-28-5	1,800	J 720	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	1,700	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	1,700	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	1,600	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,700	18	360	1
04688	Fluoranthene	206-44-0	1,800	18	180	1
04688	Fluorene	86-73-7	1,600	18	180	1
04688	Hexachlorobenzene	118-74-1	1,700	18	180	1
04688	Hexachlorobutadiene	87-68-3	1,500	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	3,200	180	540	1
04688	Hexachloroethane	67-72-1	1,400	18	180	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,500	18	180	1
04688	Isophorone	78-59-1	1,500	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

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Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,600	18	180	1
04688	2-Methylnaphthalene	91-57-6	1,500	18	180	1
04688	2-Methylphenol	95-48-7	1,500	36	180	1
04688	4-Methylphenol	106-44-5	1,600	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,500	18	180	1
04688	2-Nitroaniline	88-74-4	1,700	18	180	1
04688	3-Nitroaniline	99-09-2	1,400	36	180	1
04688	4-Nitroaniline	100-01-6	1,300	72	180	1
04688	Nitrobenzene	98-95-3	1,400	18	180	1
04688	2-Nitrophenol	88-75-5	1,600	18	180	1
04688	4-Nitrophenol	100-02-7	1,100	180	540	1
04688	N-Nitrosodimethylamine	62-75-9	1,700	36	180	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,400	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	1,600	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,500	18	180	1
04688	Pentachlorophenol	87-86-5	1,400	180	540	1
04688	Phenanthrene	85-01-8	1,600	18	180	1
04688	Phenol	108-95-2	1,600	18	180	1
04688	Pyrene	129-00-0	1,500	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,500	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	1,700	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	1,600	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	29	0.72	1.8	1
10138	Acenaphthylene	208-96-8	31	0.36	1.8	1
10138	Anthracene	120-12-7	32	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	33	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	30	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	44	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	17	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	31	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	35	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	37	6.4	19	1
10138	Chrysene	218-01-9	32	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	21	0.72	1.8	1
10138	Diethylphthalate	84-66-2	29	6.4	19	1
10138	Dimethylphthalate	131-11-3	32	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	41	6.4	19	1
10138	Fluoranthene	206-44-0	34	0.72	1.8	1
10138	Fluorene	86-73-7	32	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	20	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	31	0.72	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM						
10138	2-Methylnaphthalene	91-57-6	28	0.72	1.8	1
10138	Naphthalene	91-20-3	30	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	34	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	40	6.4	19	1
10138	Phenanthrene	85-01-8	31	0.72	1.8	1
10138	Pyrene	129-00-0	31	0.72	1.8	1
Herbicides SW-846 8151A						
10401	2,4-D	94-75-7	6.2	1.3	3.9	1
10401	Dalapon	75-99-0	5.4 J	4.7	9.7	1
10401	2,4-DB	94-82-6	25	0.67	1.8	1
10401	Dicamba	1918-00-9	1.8	0.43	1.3	1
10401	Dinoseb	88-85-7	2.4 J	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	10	0.86	1.8	1
10401	MCPA	94-74-6	1,400	82	270	1
10401	MCPP (Mecoprop)	93-65-2	990	81	270	1
10401	2,4,5-T	93-76-5	0.97	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.93	0.081	0.18	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.33	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.23	0.037	0.18	1
01363	Beta BHC	319-85-7	0.26	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.26	0.037	0.18	1
01363	Chlordane	57-74-9	0.86 U	0.86	3.7	1
01363	p,p-DDD	72-54-8	0.72	0.071	0.37	1
01363	p,p-DDE	72-55-9	1.2	0.071	0.37	1
01363	p,p-DDT	50-29-3	0.90	0.071	0.37	1
01363	Delta BHC	319-86-8	0.25	0.039	0.18	1
01363	Dieldrin	60-57-1	0.57	0.071	0.37	1
01363	Endosulfan I	959-98-8	0.26	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.77	0.071	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.77	0.071	0.37	1
01363	Endrin	72-20-8	0.57	0.071	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.42	0.071	0.37	1
01363	Endrin Ketone	53494-70-5	0.55	0.071	0.37	1
01363	Heptachlor	76-44-8	0.26	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.39	0.037	0.18	1
01363	Methoxychlor	72-43-5	2.4	0.37	1.8	1
01363	Mirex	2385-85-5	0.071 U	0.071	0.37	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.1	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs SW-846 8082

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	3.8	1.1	3.5	1
10225	PCB-1016	12674-11-2	20	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56 U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	8.4	0.35	1.8	1
10225	PCB-1260	11096-82-5	24	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,100	5.25	20.9	1
07914	Boron	7440-42-8	194	0.928	5.21	1
01650	Calcium	7440-70-2	3,690	6.39	20.9	1
01654	Iron	7439-89-6	20,300	4.91	20.9	1
01656	Lithium	7439-93-2	119	0.23	2.1	1
01657	Magnesium	7439-95-4	3,990	2.65	10.4	1
06958	Manganese	7439-96-5	430	0.0813	0.521	1
10145	Phosphorus	7723-14-0	339	0.584	10.4	1
01662	Potassium	7440-09-7	4,360	18.8	52.1	1
01667	Sodium	7440-23-5	1,080	38.9	104	1
07968	Strontium	7440-24-6	125	0.0647	0.521	1
06969	Tin	7440-31-5	372	1.04	10.4	1
06970	Titanium	7440-32-6	1,540	0.396	1.04	1
10146	Zirconium	7440-67-7	98.8	0.876	5.21	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.912	0.0626	0.209	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.7	0.0626	0.417	2
06126	Barium	7440-39-3	184	0.113	0.417	2
06127	Beryllium	7440-41-7	2.29	0.0167	0.104	2
06128	Cadmium	7440-43-9	2.09	0.0375	0.104	2
06131	Chromium	7440-47-3	45.2	0.125	0.417	2
06132	Cobalt	7440-48-4	80.7	0.0209	0.104	2
06133	Copper	7440-50-8	28.2	0.0688	0.417	2
06135	Lead	7439-92-1	25.3	0.0108	0.209	2
06138	Molybdenum	7439-98-7	19.3	0.0521	0.104	2
06139	Nickel	7440-02-0	33.8	0.104	0.417	2
06141	Selenium	7782-49-2	2.05	0.0417	0.417	2
06142	Silver	7440-22-4	17.5	0.0125	0.104	2
06145	Thallium	7440-28-0	1.13	0.0313	0.104	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6020	mg/kg	mg/kg	mg/kg	
06148	Vanadium	7440-62-2	70.7	0.0229	0.104	2
06149	Zinc	7440-66-6	97.4	0.584	3.13	2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.174	0.0030	0.103	1
Wet Chemistry						
		EPA 160.3 modified	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 13:13	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 15:21	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/01/2011 22:42	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 00:56	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 05:17	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:37	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 12:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:43	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Sample Description: SL-189-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167484
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,900	5.35	21.3	1
07914	Boron	7440-42-8	4.06 J	0.946	5.32	1
01650	Calcium	7440-70-2	2,660	6.52	21.3	1
01654	Iron	7439-89-6	16,900	5.01	21.3	1
01656	Lithium	7439-93-2	15.9	0.23	2.1	1
01657	Magnesium	7439-95-4	3,280	2.70	10.6	1
06958	Manganese	7439-96-5	349	0.0830	0.532	1
10145	Phosphorus	7723-14-0	206	0.596	10.6	1
01662	Potassium	7440-09-7	2,780	19.1	53.2	1
01667	Sodium	7440-23-5	87.5 J	39.7	106	1
07968	Strontium	7440-24-6	21.5	0.0659	0.532	1
06969	Tin	7440-31-5	2.28 J	1.06	10.6	1
06970	Titanium	7440-32-6	1,140	0.404	1.06	1
10146	Zirconium	7440-67-7	2.57 J	0.893	5.32	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.233	0.0620	0.207	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	7.83	0.0620	0.413	2
06126	Barium	7440-39-3	151	0.112	0.413	2
06127	Beryllium	7440-41-7	0.827	0.0165	0.103	2
06128	Cadmium	7440-43-9	0.325	0.0372	0.103	2
06131	Chromium	7440-47-3	27.3	0.124	0.413	2
06132	Cobalt	7440-48-4	8.02	0.0207	0.103	2
06133	Copper	7440-50-8	13.4	0.0682	0.413	2
06135	Lead	7439-92-1	18.2	0.0107	0.207	2
06138	Molybdenum	7439-98-7	0.979	0.0516	0.103	2
06139	Nickel	7440-02-0	17.7	0.103	0.413	2
06141	Selenium	7782-49-2	0.124 J	0.0413	0.413	2
06142	Silver	7440-22-4	0.108	0.0124	0.103	2
06145	Thallium	7440-28-0	0.418	0.0310	0.103	2
06148	Vanadium	7440-62-2	48.5	0.0227	0.103	2
06149	Zinc	7440-66-6	77.8	0.578	3.10	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0029 U	0.0029	0.102	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5	0.86	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.2	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.57 J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167484
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	463	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	7.14	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1
11626	28a Moisture Content by 160.3	n.a.	6.8	0.50	0.50	1
The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167484
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL189 SDG#: DE042-14DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 12:48	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:41	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 11:40	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 03:51	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 20:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL192 SDG#: DE042-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	72	U 72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U 720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	47	J 18	360	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	72	U 72	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	540	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL192 SDG#: DE042-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36 U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36 U	36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72 U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.44 J	0.36	1.8	1
10138	Anthracene	120-12-7	1.1 J	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	4.9	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	4.8	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	8.3	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	2.6	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	2.8	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5 U	6.5	19	1
10138	Di-n-butylphthalate	84-74-2	6.5 U	6.5	19	1
10138	Chrysene	218-01-9	8.0	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.80 J	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	19	1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	19	1
10138	Fluoranthene	206-44-0	13	0.72	1.8	1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.7 J	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	1.9	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	2.1	0.72	1.8	1
10138	Naphthalene	91-20-3	1.8 J	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	19	1
10138	Phenanthrene	85-01-8	8.2	0.72	1.8	1
10138	Pyrene	129-00-0	9.3	0.72	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.7	1
10401	2,4-DB	94-82-6	14 U	14	14	1
10401	Dicamba	1918-00-9	0.84 J	0.43	1.3	1
10401	Dinoseb	88-85-7	1.8 U	1.8	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86 U	0.86	1.8	1
10401	MCPA	94-74-6	82 U	82	270	1
10401	MCPP (Mecoprop)	93-65-2	470 U	470	470	1
10401	2,4,5-T	93-76-5	0.088 U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.081 U	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

CDM Federal Programs Corp.
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Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL192 SDG#: DE042-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.36 U	0.36	0.89	5
01363	Alpha BHC	319-84-6	0.18 U	0.18	0.89	5
01363	Beta BHC	319-85-7	0.32 U	0.32	0.89	5
01363	Gamma BHC - Lindane	58-89-9	0.18 U	0.18	0.89	5
01363	Chlordane	57-74-9	4.3 U	4.3	18	5
01363	p,p-DDD	72-54-8	0.36 U	0.36	1.8	5
01363	p,p-DDE	72-55-9	0.40 U	0.40	1.8	5
01363	p,p-DDT	50-29-3	0.36 U	0.36	1.8	5
01363	Delta BHC	319-86-8	0.19 U	0.19	0.89	5
01363	Dieldrin	60-57-1	0.36 U	0.36	1.8	5
01363	Endosulfan I	959-98-8	0.24 U	0.24	0.89	5
01363	Endosulfan II	33213-65-9	0.36 U	0.36	1.8	5
01363	Endosulfan Sulfate	1031-07-8	0.36 U	0.36	1.8	5
01363	Endrin	72-20-8	0.36 U	0.36	1.8	5
01363	Endrin Aldehyde	7421-93-4	0.36 U	0.36	1.8	5
01363	Endrin Ketone	53494-70-5	0.36 U	0.36	1.8	5
01363	Heptachlor	76-44-8	0.32 U	0.32	0.89	5
01363	Heptachlor Epoxide	1024-57-3	0.18 U	0.18	0.89	5
01363	Methoxychlor	72-43-5	1.8 U	1.8	8.9	5
01363	Mirex	2385-85-5	0.36 U	0.36	1.8	5
01363	Toxaphene	8001-35-2	12 U	12	36	5

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	5.4 U	5.4	18	5
10225	Aroclor 5442	12642-23-8	5.4 U	5.4	18	5
10225	Aroclor 5460	11126-42-4	5.4 U	5.4	18	5
10225	PCB-1016	12674-11-2	1.8 U	1.8	9.1	5
10225	PCB-1221	11104-28-2	2.7 U	2.7	9.1	5
10225	PCB-1232	11141-16-5	2.8 U	2.8	9.1	5
10225	PCB-1242	53469-21-9	2.7 U	2.7	9.1	5
10225	PCB-1248	12672-29-6	1.8 U	1.8	9.1	5
10225	PCB-1254	11097-69-1	3.3 J	1.8	9.1	5
10225	PCB-1260	11096-82-5	5.5 J	1.8	9.1	5
10225	PCB-1262	37324-23-5	1.8 U	1.8	9.1	5
10225	PCB-1268	11100-14-4	1.8 U	1.8	9.1	5

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg

*=This limit was used in the evaluation of the final result

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

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14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL192 SDG#: DE042-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,600	5.16	20.5	1
07914	Boron	7440-42-8	3.00 J	0.912	5.13	1
01650	Calcium	7440-70-2	3,140	6.28	20.5	1
01654	Iron	7439-89-6	17,600	4.83	20.5	1
01656	Lithium	7439-93-2	18.4	0.23	2.1	1
01657	Magnesium	7439-95-4	4,110	2.60	10.3	1
06958	Manganese	7439-96-5	223	0.0800	0.513	1
10145	Phosphorus	7723-14-0	316	0.574	10.3	1
01662	Potassium	7440-09-7	2,680	18.5	51.3	1
01667	Sodium	7440-23-5	86.3 J	38.2	103	1
07968	Strontium	7440-24-6	21.2	0.0636	0.513	1
06969	Tin	7440-31-5	2.02 J	1.03	10.3	1
06970	Titanium	7440-32-6	859	0.390	1.03	1
10146	Zirconium	7440-67-7	1.38 J	0.861	5.13	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.247	0.0615	0.205	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	15.1	0.0615	0.410	2
06126	Barium	7440-39-3	166	0.111	0.410	2
06127	Beryllium	7440-41-7	0.846	0.0164	0.103	2
06128	Cadmium	7440-43-9	0.507	0.0369	0.103	2
06131	Chromium	7440-47-3	33.2	0.123	0.410	2
06132	Cobalt	7440-48-4	8.86	0.0205	0.103	2
06133	Copper	7440-50-8	17.3	0.0677	0.410	2
06135	Lead	7439-92-1	16.4	0.0107	0.205	2
06138	Molybdenum	7439-98-7	0.936	0.0513	0.103	2
06139	Nickel	7440-02-0	21.8	0.103	0.410	2
06141	Selenium	7782-49-2	0.118 J	0.0410	0.410	2
06142	Silver	7440-22-4	0.121	0.0123	0.103	2
06145	Thallium	7440-28-0	0.424	0.0308	0.103	2
06148	Vanadium	7440-62-2	56.9	0.0226	0.103	2
06149	Zinc	7440-66-6	129	0.574	3.08	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.321	0.0031	0.108	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	5.1	0.86	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.3	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	2.5	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
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Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL192 SDG#: DE042-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	466	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.12	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	7.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 20:03	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 09:57	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 06:57	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 01:25	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 05:35	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL192 SDG#: DE042-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01645	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:38	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:44	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 13:20	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 05:46	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 20:50	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL194 SDG#: DE042-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U 180	550	1
04688	Benzyl alcohol	100-51-6	180	U 180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180	1
04688	4-Chloroaniline	106-47-8	74	U 74	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550	1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	20	J 18	370	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	74	U 74	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	37	U 37	180	1
04688	4-Methylphenol	106-44-5	37	U 37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	37	U 37	180	1
04688	4-Nitroaniline	100-01-6	74	U 74	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	550	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL194 SDG#: DE042-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	18 U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37 U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37 U	37	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74 U	0.74	1.8	1
10138	Acenaphthylene	208-96-8	0.45 J	0.37	1.8	1
10138	Anthracene	120-12-7	1.2 J	0.37	1.8	1
10138	Benzo(a)anthracene	56-55-3	3.6	0.74	1.8	1
10138	Benzo(a)pyrene	50-32-8	7.3	0.74	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	18	0.74	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	11	0.74	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	4.3	0.74	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.7 U	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	6.7 U	6.7	20	1
10138	Chrysene	218-01-9	8.1	0.37	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.5 J	0.74	1.8	1
10138	Diethylphthalate	84-66-2	6.7 U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7 U	6.7	20	1
10138	Fluoranthene	206-44-0	8.9	0.74	1.8	1
10138	Fluorene	86-73-7	0.74 U	0.74	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	12	0.74	1.8	1
10138	1-Methylnaphthalene	90-12-0	2.3	0.74	1.8	1
10138	2-Methylnaphthalene	91-57-6	2.5	0.74	1.8	1
10138	Naphthalene	91-20-3	2.3	0.74	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.74 U	0.74	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.7 U	6.7	20	1
10138	Phenanthrene	85-01-8	6.4	0.74	1.8	1
10138	Pyrene	129-00-0	7.3	0.74	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	4.0	1
10401	Dalapon	75-99-0	4.9 U	4.9	10	1
10401	2,4-DB	94-82-6	23 U	23	23	1
10401	Dicamba	1918-00-9	0.46 J	0.44	1.3	1
10401	Dinoseb	88-85-7	0.89 U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	3.0 U	3.0	3.0	1
10401	MCPA	94-74-6	180 U	180	280	1
10401	MCPP (Mecoprop)	93-65-2	590 U	590	590	1
10401	2,4,5-T	93-76-5	0.091 U	0.091	0.19	1
10401	2,4,5-TP	93-72-1	0.083 U	0.083	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL194 SDG#: DE042-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.073 U	0.073	0.18	1
01363	Alpha BHC	319-84-6	0.14 J	0.038	0.18	1
01363	Beta BHC	319-85-7	0.067 U	0.067	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.18	1
01363	Chlordane	57-74-9	5.0 U	5.0	5.0	1
01363	p,p-DDD	72-54-8	0.23 U	0.23	0.38	1
01363	p,p-DDE	72-55-9	0.29 U	0.29	0.38	1
01363	p,p-DDT	50-29-3	0.51 U	0.51	0.51	1
01363	Delta BHC	319-86-8	0.040 U	0.040	0.18	1
01363	Dieldrin	60-57-1	0.073 U	0.073	0.38	1
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.080 U	0.080	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.073 U	0.073	0.38	1
01363	Endrin	72-20-8	0.073 U	0.073	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.23 U	0.23	0.38	1
01363	Endrin Ketone	53494-70-5	0.13 U	0.13	0.38	1
01363	Heptachlor	76-44-8	0.44 U	0.44	0.44	1
01363	Heptachlor Epoxide	1024-57-3	0.065 U	0.065	0.18	1
01363	Methoxychlor	72-43-5	0.38 U	0.38	1.8	1
01363	Mirex	2385-85-5	0.13 U	0.13	0.38	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.3	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	3.0 J	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.55 U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.55 U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9	1
10225	PCB-1254	11097-69-1	9.5	0.37	1.9	1
10225	PCB-1260	11096-82-5	3.9	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,800	5.47	21.7	1
07914	Boron	7440-42-8	3.76 J	0.967	5.43	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL194 SDG#: DE042-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	3,060	6.66	21.7	1
01654	Iron	7439-89-6	19,600	5.12	21.7	1
01656	Lithium	7439-93-2	19.6	0.24	2.2	1
01657	Magnesium	7439-95-4	4,200	2.76	10.9	1
06958	Manganese	7439-96-5	290	0.0848	0.543	1
10145	Phosphorus	7723-14-0	348	0.609	10.9	1
01662	Potassium	7440-09-7	3,010	19.6	54.3	1
01667	Sodium	7440-23-5	98.5 J	40.5	109	1
07968	Strontium	7440-24-6	21.6	0.0674	0.543	1
06969	Tin	7440-31-5	2.67 J	1.09	10.9	1
06970	Titanium	7440-32-6	1,210	0.413	1.09	1
10146	Zirconium	7440-67-7	1.63 J	0.913	5.43	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.209 J	0.0646	0.215	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	8.02	0.0646	0.431	2
06126	Barium	7440-39-3	156	0.116	0.431	2
06127	Beryllium	7440-41-7	0.881	0.0172	0.108	2
06128	Cadmium	7440-43-9	0.261	0.0387	0.108	2
06131	Chromium	7440-47-3	29.1	0.129	0.431	2
06132	Cobalt	7440-48-4	8.37	0.0215	0.108	2
06133	Copper	7440-50-8	12.5	0.0710	0.431	2
06135	Lead	7439-92-1	14.2	0.0112	0.215	2
06138	Molybdenum	7439-98-7	0.752	0.0538	0.108	2
06139	Nickel	7440-02-0	17.2	0.108	0.431	2
06141	Selenium	7782-49-2	0.132 J	0.0431	0.431	2
06142	Silver	7440-22-4	0.0775 J	0.0129	0.108	2
06145	Thallium	7440-28-0	0.391	0.0323	0.108	2
06148	Vanadium	7440-62-2	56.3	0.0237	0.108	2
06149	Zinc	7440-66-6	90.8	0.603	3.23	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.101 J	0.0029	0.103	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6	0.89	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.3	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.36 J	0.22	1.1	1
	ASTM D1498		mV	mV	mV	

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL194 SDG#: DE042-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	451	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.19	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	9.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 20:33	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 10:29	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 07:25	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 01:40	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 05:54	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL194 SDG#: DE042-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:38	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:38	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:48	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 13:34	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 06:09	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 21:06	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL196 SDG#: DE042-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	70	U 70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U 700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U 70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	70	U 70	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1
04688	Phenol	108-95-2	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL196 SDG#: DE042-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70 U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.41 J	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	2.4	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	3.0	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	4.5	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.4 J	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	1.8	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3 U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3 U	6.3	19	1
10138	Chrysene	218-01-9	4.2	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70 U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3 U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3 U	6.3	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	8.3 J	6.3	19	1
10138	Fluoranthene	206-44-0	5.0	0.70	1.8	1
10138	Fluorene	86-73-7	0.70 U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.93 J	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.96 J	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.1 J	0.70	1.8	1
10138	Naphthalene	91-20-3	0.96 J	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70 U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3 U	6.3	19	1
10138	Phenanthrene	85-01-8	4.5	0.70	1.8	1
10138	Pyrene	129-00-0	4.6	0.70	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6 U	4.6	9.5	1
10401	2,4-DB	94-82-6	22 U	22	22	1
10401	Dicamba	1918-00-9	0.42 U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84 U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	4.1 U	4.1	4.1	1
10401	MCPA	94-74-6	80 U	80	260	1
10401	MCPP (Mecoprop)	93-65-2	560 U	560	560	1
10401	2,4,5-T	93-76-5	0.086 U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.27 U	0.27	0.27	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL196 SDG#: DE042-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.					
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.084 J	0.070	0.17	1
01363	Alpha BHC	319-84-6	0.043 J	0.036	0.17	1
01363	Beta BHC	319-85-7	0.063 U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.048 J	0.036	0.17	1
01363	Chlordane	57-74-9	0.84 U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.13 U	0.13	0.36	1
01363	p,p-DDE	72-55-9	0.43 U	0.43	0.43	1
01363	p,p-DDT	50-29-3	0.48 U	0.48	0.48	1
01363	Delta BHC	319-86-8	0.12 U	0.12	0.17	1
01363	Dieldrin	60-57-1	0.070 U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.081 U	0.081	0.17	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.37 U	0.37	0.37	1
01363	Heptachlor	76-44-8	0.063 U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.40 U	0.40	0.40	1
01363	Methoxychlor	72-43-5	0.67 U	0.67	1.7	1
01363	Mirex	2385-85-5	0.87 U	0.87	0.87	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	6.1	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8	1
10225	PCB-1254	11097-69-1	20	0.35	1.8	1
10225	PCB-1260	11096-82-5	4.8	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,100	5.05	20.1	1
07914	Boron	7440-42-8	3.62 J	0.893	5.02	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL196 SDG#: DE042-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	2,860	6.15	20.1	1
01654	Iron	7439-89-6	20,400	4.73	20.1	1
01656	Lithium	7439-93-2	17.8	0.22	2.0	1
01657	Magnesium	7439-95-4	3,870	2.55	10.0	1
06958	Manganese	7439-96-5	352	0.0783	0.502	1
10145	Phosphorus	7723-14-0	325	0.562	10.0	1
01662	Potassium	7440-09-7	3,510	18.1	50.2	1
01667	Sodium	7440-23-5	104	37.4	100	1
07968	Strontium	7440-24-6	29.4	0.0622	0.502	1
06969	Tin	7440-31-5	2.24 J	1.00	10.0	1
06970	Titanium	7440-32-6	1,190	0.381	1.00	1
10146	Zirconium	7440-67-7	2.34 J	0.843	5.02	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.206	0.0602	0.201	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	11.1	0.0602	0.401	2
06126	Barium	7440-39-3	178	0.108	0.401	2
06127	Beryllium	7440-41-7	0.974	0.0161	0.100	2
06128	Cadmium	7440-43-9	0.407	0.0361	0.100	2
06131	Chromium	7440-47-3	29.6	0.120	0.401	2
06132	Cobalt	7440-48-4	11.8	0.0201	0.100	2
06133	Copper	7440-50-8	14.4	0.0662	0.401	2
06135	Lead	7439-92-1	16.6	0.0104	0.201	2
06138	Molybdenum	7439-98-7	1.35	0.0502	0.100	2
06139	Nickel	7440-02-0	19.0	0.100	0.401	2
06141	Selenium	7782-49-2	0.135 J	0.0401	0.401	2
06142	Silver	7440-22-4	0.105	0.0120	0.100	2
06145	Thallium	7440-28-0	0.410	0.0301	0.100	2
06148	Vanadium	7440-62-2	55.6	0.0221	0.100	2
06149	Zinc	7440-66-6	91.8	0.562	3.01	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0267 J	0.0028	0.0989	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4	0.84	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5 U	9.5	31.6	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.72 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL196 SDG#: DE042-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	471	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.02	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	5.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 21:02	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 01:43	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 07:52	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 01:55	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 06:12	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL196 SDG#: DE042-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:41	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:41	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:43	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:49	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 13:48	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 06:32	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 21:22	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL198 SDG#: DE042-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U 18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	Diethylphthalate	84-66-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	Dimethylphthalate	131-11-3	18	U 18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	360	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL198 SDG#: DE042-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	18	U 18	180	1
04688	Pentachlorophenol	87-86-5	180	U 180	530	1
04688	Phenol	108-95-2	18	U 18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.6	U 3.6	8.9	5
10138	Acenaphthylene	208-96-8	1.8	U 1.8	8.9	5
10138	Anthracene	120-12-7	1.8	U 1.8	8.9	5
10138	Benzo(a)anthracene	56-55-3	3.9	J 3.6	8.9	5
10138	Benzo(a)pyrene	50-32-8	8.6	J 3.6	8.9	5
10138	Benzo(b)fluoranthene	205-99-2	24	3.6	8.9	5
10138	Benzo(g,h,i)perylene	191-24-2	15	3.6	8.9	5
10138	Benzo(k)fluoranthene	207-08-9	3.6	U 3.6	8.9	5
10138	Chrysene	218-01-9	14	1.8	8.9	5
10138	Dibenz(a,h)anthracene	53-70-3	7.6	J 3.6	8.9	5
10138	Fluoranthene	206-44-0	4.5	J 3.6	8.9	5
10138	Fluorene	86-73-7	3.6	U 3.6	8.9	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	9.6	3.6	8.9	5
10138	1-Methylnaphthalene	90-12-0	3.6	U 3.6	8.9	5
10138	2-Methylnaphthalene	91-57-6	3.6	U 3.6	8.9	5
10138	Naphthalene	91-20-3	3.6	U 3.6	8.9	5
10138	N-Nitrosodimethylamine	62-75-9	3.6	U 3.6	8.9	5
10138	Phenanthrene	85-01-8	4.7	J 3.6	8.9	5
10138	Pyrene	129-00-0	4.4	J 3.6	8.9	5

Reporting limits were raised due to interference from the sample matrix.

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U 1.3	3.8
10401	Dalapon	75-99-0	4.7	U 4.7	9.6
10401	2,4-DB	94-82-6	17	U 17	17
10401	Dicamba	1918-00-9	0.43	U 0.43	1.3
10401	Dinoseb	88-85-7	0.85	U 0.85	2.6
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U 0.85	1.8
10401	MCPA	94-74-6	81	U 81	270
10401	MCPP (Mecoprop)	93-65-2	540	U 540	540
10401	2,4,5-T	93-76-5	0.088	U 0.088	0.18
10401	2,4,5-TP	93-72-1	0.41	U 0.41	0.41

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL198 SDG#: DE042-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
statistical limits of 0-36%, the data is reported.						
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.						
Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.071 U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.14 J	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.30 U	0.30	0.36	1
01363	p,p-DDE	72-55-9	0.071 U	0.071	0.36	1
01363	p,p-DDT	50-29-3	0.41 U	0.41	0.41	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.071 U	0.071	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.13 U	0.13	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.071 U	0.071	0.36	1
01363	Endrin	72-20-8	0.071 U	0.071	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.071 U	0.071	0.36	1
01363	Endrin Ketone	53494-70-5	0.071 U	0.071	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.17 U	0.17	0.18	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	1.3 U	1.3	1.3	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.1	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	SW-846 8082	ug/kg		ug/kg	ug/kg	
10225 Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225 Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225 Aroclor 5460	11126-42-4	3.2	J	1.1	3.5	1
10225 PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225 PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225 PCB-1232	11141-16-5	0.56	U	0.56	1.8	1
10225 PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225 PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225 PCB-1254	11097-69-1	5.5		0.35	1.8	1
10225 PCB-1260	11096-82-5	2.6		0.35	1.8	1
10225 PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225 PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL198 SDG#: DE042-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,900	5.17	20.5	1
07914	Boron	7440-42-8	4.82 J	0.914	5.14	1
01650	Calcium	7440-70-2	3,690	6.30	20.5	1
01654	Iron	7439-89-6	17,900	4.84	20.5	1
01656	Lithium	7439-93-2	17.2	0.23	2.1	1
01657	Magnesium	7439-95-4	3,670	2.61	10.3	1
06958	Manganese	7439-96-5	305	0.0801	0.514	1
10145	Phosphorus	7723-14-0	332	0.575	10.3	1
01662	Potassium	7440-09-7	3,150	18.5	51.4	1
01667	Sodium	7440-23-5	96.2 J	38.3	103	1
07968	Strontium	7440-24-6	22.6	0.0637	0.514	1
06969	Tin	7440-31-5	2.30 J	1.03	10.3	1
06970	Titanium	7440-32-6	1,130	0.390	1.03	1
10146	Zirconium	7440-67-7	1.81 J	0.863	5.14	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.530	0.0628	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	12.8	0.0628	0.419	2
06126	Barium	7440-39-3	158	0.113	0.419	2
06127	Beryllium	7440-41-7	0.799	0.0168	0.105	2
06128	Cadmium	7440-43-9	1.33	0.0377	0.105	2
06131	Chromium	7440-47-3	38.6	0.126	0.419	2
06132	Cobalt	7440-48-4	33.3	0.0209	0.105	2
06133	Copper	7440-50-8	102	0.0691	0.419	2
06135	Lead	7439-92-1	59.0	0.0109	0.209	2
06138	Molybdenum	7439-98-7	2.73	0.0524	0.105	2
06139	Nickel	7440-02-0	36.3	0.105	0.419	2
06141	Selenium	7782-49-2	0.126 J	0.0419	0.419	2
06142	Silver	7440-22-4	0.146	0.0126	0.105	2
06145	Thallium	7440-28-0	0.422	0.0314	0.105	2
06148	Vanadium	7440-62-2	55.3	0.0230	0.105	2
06149	Zinc	7440-66-6	188	0.587	3.14	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0108 J	0.0028	0.0992	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2	0.85	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.1	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.70 J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL198 SDG#: DE042-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	475	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.56	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/20/2011 17:35	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 11:02	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 08:20	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 02:10	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 06:31	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL198 SDG#: DE042-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01645	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:45	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:51	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 14:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 07:19	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 21:38	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL199 SDG#: DE042-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530	1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U 180	530	1
04688	Benzyl alcohol	100-51-6	180	U 180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	35	U 35	180	1
04688	4-Methylphenol	106-44-5	35	U 35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	35	U 35	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	180	U 180	530	1
04688	Phenol	108-95-2	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL199 SDG#: DE042-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35 U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35 U	35	180	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71 U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35 U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35 U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	1.3 J	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	2.0	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	3.2	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.4 J	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	1.0 J	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4 U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4 U	6.4	19	1
10138	Chrysene	218-01-9	2.6	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71 U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4 U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4 U	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	8.5 J	6.4	19	1
10138	Fluoranthene	206-44-0	1.8	0.71	1.8	1
10138	Fluorene	86-73-7	0.71 U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.94 J	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71 U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71 U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.77 J	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71 U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4 U	6.4	19	1
10138	Phenanthrene	85-01-8	1.2 J	0.71	1.8	1
10138	Pyrene	129-00-0	1.7 J	0.71	1.8	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.3 U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.6	1
10401	2,4-DB	94-82-6	0.66 U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.43 U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85 U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85 U	0.85	1.8	1
10401	MCPA	94-74-6	570	81	270	1
10401	MCPP (Mecoprop)	93-65-2	220 J	80	270	1
10401	2,4,5-T	93-76-5	0.087 U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080 U	0.080	0.18	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		
01363	Aldrin	309-00-2	0.070 U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL199 SDG#: DE042-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Beta BHC	319-85-7	0.27 U	0.27	0.27	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070 U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.38 U	0.38	0.38	1
01363	p,p-DDT	50-29-3	0.73 U	0.73	0.73	1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.24 U	0.24	0.36	1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070 U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36	1
01363	Endrin	72-20-8	0.070 U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070 U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.21 U	0.21	0.21	1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	2.1 U	2.1	7.0	2
10225	Aroclor 5442	12642-23-8	2.1 U	2.1	7.0	2
10225	Aroclor 5460	11126-42-4	9.9	2.1	7.0	2
10225	PCB-1016	12674-11-2	0.70 U	0.70	3.6	2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.6	2
10225	PCB-1232	11141-16-5	1.1 U	1.1	3.6	2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.6	2
10225	PCB-1248	12672-29-6	0.70 U	0.70	3.6	2
10225	PCB-1254	11097-69-1	7.8	0.70	3.6	2
10225	PCB-1260	11096-82-5	13	0.70	3.6	2
10225	PCB-1262	37324-23-5	0.70 U	0.70	3.6	2
10225	PCB-1268	11100-14-4	0.70 U	0.70	3.6	2
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	15,400	5.35	21.3	1
07914	Boron	7440-42-8	4.89 J	0.947	5.32	1
01650	Calcium	7440-70-2	4,040	6.52	21.3	1
01654	Iron	7439-89-6	20,000	5.01	21.3	1
01656	Lithium	7439-93-2	19.2	0.23	2.1	1
01657	Magnesium	7439-95-4	4,360	2.70	10.6	1
06958	Manganese	7439-96-5	346	0.0830	0.532	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL199 SDG#: DE042-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
10145	Phosphorus	7723-14-0	300	0.596	10.6	1
01662	Potassium	7440-09-7	3,260	19.1	53.2	1
01667	Sodium	7440-23-5	93.2 J	39.7	106	1
07968	Strontium	7440-24-6	22.4	0.0660	0.532	1
06969	Tin	7440-31-5	2.28 J	1.06	10.6	1
06970	Titanium	7440-32-6	1,160	0.404	1.06	1
10146	Zirconium	7440-67-7	1.53 J	0.894	5.32	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.157 J	0.0632	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	9.33	0.0632	0.421	2
06126	Barium	7440-39-3	142	0.114	0.421	2
06127	Beryllium	7440-41-7	0.742	0.0169	0.105	2
06128	Cadmium	7440-43-9	0.517	0.0379	0.105	2
06131	Chromium	7440-47-3	29.9	0.126	0.421	2
06132	Cobalt	7440-48-4	10.0	0.0211	0.105	2
06133	Copper	7440-50-8	25.4	0.0695	0.421	2
06135	Lead	7439-92-1	22.0	0.0110	0.211	2
06138	Molybdenum	7439-98-7	1.15	0.0527	0.105	2
06139	Nickel	7440-02-0	23.3	0.105	0.421	2
06141	Selenium	7782-49-2	0.204 J	0.0421	0.421	2
06142	Silver	7440-22-4	0.0725 J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.424	0.0316	0.105	2
06148	Vanadium	7440-62-2	50.1	0.0232	0.105	2
06149	Zinc	7440-66-6	82.9	0.590	3.16	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0067 J	0.0029	0.100	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.8	0.85	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	31.9	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.76 J	0.21	1.1	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	413	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL199 SDG#: DE042-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	Wet Chemistry	SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.62	0.0100	0.0100	1
	Wet Chemistry	EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/20/2011 18:03	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 11:34	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 08:47	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 02:25	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 06:49	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL199 SDG#: DE042-19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:47	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:47	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:47	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:52	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 14:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 07:42	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 21:54	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL202 SDG#: DE042-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540	1
04688	Benidine	92-87-5	1,300	U 1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U 180	540	1
04688	Benzyl alcohol	100-51-6	180	U 180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U 18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U 18	180	1
04688	Carbazole	86-74-8	18	U 18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180	1
04688	4-Chloroaniline	106-47-8	71	U 71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180	1
04688	2-Chlorophenol	95-57-8	18	U 18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180	1
04688	Dibenzofuran	132-64-9	18	U 18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180	1
04688	Diethylphthalate	84-66-2	18	U 18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180	1
04688	Dimethylphthalate	131-11-3	18	U 18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540	1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U 18	360	1
04688	Fluoranthene	206-44-0	59	J 18	180	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	71	U 71	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL202 SDG#: DE042-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	
04688	N-Nitrosodiphenylamine	86-30-6	18 U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	18 U	18	180	1
04688	Pentachlorophenol	87-86-5	180 U	180	540	1
04688	Phenol	108-95-2	18 U	18	180	1
04688	Pyrene	129-00-0	57 J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18 U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36 U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36 U	36	180	1
GC/MS	Semivolatiles SW-846 8270C SIM		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.6 U	3.6	8.9	5
10138	Acenaphthylene	208-96-8	1.8 U	1.8	8.9	5
10138	Anthracene	120-12-7	1.8 U	1.8	8.9	5
10138	Benzo(a)anthracene	56-55-3	6.4 J	3.6	8.9	5
10138	Benzo(a)pyrene	50-32-8	6.0 J	3.6	8.9	5
10138	Benzo(b)fluoranthene	205-99-2	10	3.6	8.9	5
10138	Benzo(g,h,i)perylene	191-24-2	4.4 J	3.6	8.9	5
10138	Benzo(k)fluoranthene	207-08-9	3.6 U	3.6	8.9	5
10138	Chrysene	218-01-9	8.6 J	1.8	8.9	5
10138	Dibenz(a,h)anthracene	53-70-3	3.6 U	3.6	8.9	5
10138	Fluorene	86-73-7	3.6 U	3.6	8.9	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.6 U	3.6	8.9	5
10138	1-Methylnaphthalene	90-12-0	3.6 U	3.6	8.9	5
10138	2-Methylnaphthalene	91-57-6	3.6 U	3.6	8.9	5
10138	Naphthalene	91-20-3	3.6 U	3.6	8.9	5
10138	N-Nitrosodimethylamine	62-75-9	3.6 U	3.6	8.9	5
10138	Phenanthrene	85-01-8	4.8 J	3.6	8.9	5
Reporting limits were raised due to interference from the sample matrix.						
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3 U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7 U	4.7	9.6	1
10401	2,4-DB	94-82-6	17 U	17	17	1
10401	Dicamba	1918-00-9	0.43 U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.86 U	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86 U	0.86	1.8	1
10401	MCPA	94-74-6	310	81	270	1
10401	MCPP (Mecoprop)	93-65-2	560 U	560	560	1
10401	2,4,5-T	93-76-5	0.088 U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.080 U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL202 SDG#: DE042-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs						
	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.071 U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18	1
01363	Chlordane	57-74-9	4.6 U	4.6	4.6	1
01363	p,p-DDD	72-54-8	0.68 U	0.68	0.68	1
01363	p,p-DDE	72-55-9	0.084 U	0.084	0.36	1
01363	p,p-DDT	50-29-3	0.64 U	0.64	0.64	1
01363	Delta BHC	319-86-8	0.039 U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.35 U	0.35	0.36	1
01363	Endosulfan I	959-98-8	0.083 U	0.083	0.18	1
01363	Endosulfan II	33213-65-9	0.21 U	0.21	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.071 U	0.071	0.36	1
01363	Endrin	72-20-8	0.071 U	0.071	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.071 U	0.071	0.36	1
01363	Endrin Ketone	53494-70-5	0.071 U	0.071	0.36	1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.18 U	0.18	0.18	1
01363	Methoxychlor	72-43-5	0.43 U	0.43	1.8	1
01363	Mirex	2385-85-5	0.071 U	0.071	0.36	1
01363	Toxaphene	8001-35-2	2.4 U	2.4	7.1	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	2.2 J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56 U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8	1
10225	PCB-1248	12672-29-6	1.8 J	0.35	1.8	1
10225	PCB-1254	11097-69-1	2.4	0.35	1.8	1
10225	PCB-1260	11096-82-5	1.8 J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,500	5.34	21.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL202 SDG#: DE042-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
07914	Boron	7440-42-8	4.42 J	0.944	5.31	1
01650	Calcium	7440-70-2	3,400	6.51	21.2	1
01654	Iron	7439-89-6	22,900	5.00	21.2	1
01656	Lithium	7439-93-2	21.9	0.23	2.1	1
01657	Magnesium	7439-95-4	4,580	2.70	10.6	1
06958	Manganese	7439-96-5	350	0.0828	0.531	1
10145	Phosphorus	7723-14-0	445	0.594	10.6	1
01662	Potassium	7440-09-7	3,960	19.1	53.1	1
01667	Sodium	7440-23-5	93.3 J	39.6	106	1
07968	Strontium	7440-24-6	22.6	0.0658	0.531	1
06969	Tin	7440-31-5	2.61 J	1.06	10.6	1
06970	Titanium	7440-32-6	1,240	0.403	1.06	1
10146	Zirconium	7440-67-7	1.47 J	0.891	5.31	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.189 J	0.0618	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	7.14	0.0618	0.412	2
06126	Barium	7440-39-3	154	0.111	0.412	2
06127	Beryllium	7440-41-7	0.775	0.0165	0.103	2
06128	Cadmium	7440-43-9	0.334	0.0371	0.103	2
06131	Chromium	7440-47-3	28.3	0.124	0.412	2
06132	Cobalt	7440-48-4	7.91	0.0206	0.103	2
06133	Copper	7440-50-8	13.2	0.0680	0.412	2
06135	Lead	7439-92-1	17.3	0.0107	0.206	2
06138	Molybdenum	7439-98-7	1.05	0.0515	0.103	2
06139	Nickel	7440-02-0	18.1	0.103	0.412	2
06141	Selenium	7782-49-2	0.0909 J	0.0412	0.412	2
06142	Silver	7440-22-4	0.0856 J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.405	0.0309	0.103	2
06148	Vanadium	7440-62-2	53.0	0.0227	0.103	2
06149	Zinc	7440-66-6	98.7	0.577	3.09	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0503 J	0.0029	0.102	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5	0.86	1.1	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	32.2	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.86 J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL202 SDG#: DE042-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	418	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.50	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/20/2011 18:32	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 12:06	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 09:15	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 02:39	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 07:08	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/03/2011 16:12

SL202 SDG#: DE042-20*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:53	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 14:31	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 08:05	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 22:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10355SLB026 Sample number(s): 6167468-6167483, 6167485-6167490									
Acenaphthene	17	U	17.	170	ug/kg	90	76-111		
Acenaphthylene	17	U	17.	170	ug/kg	92	75-122		
Aniline	170		170.	500	ug/kg	73	10-107		
	U								
Anthracene	17	U	17.	170	ug/kg	96	76-112		
Benzidine	1,200		1,200.	3,300	ug/kg	62	15-121		
	U								
Benzo(a)anthracene	17	U	17.	170	ug/kg	92	73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	87	69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	85	61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	88	65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	88	67-125		
Benzoic acid	170		170.	500	ug/kg	87	10-154		
	U								
Benzyl alcohol	170		170.	500	ug/kg	94	68-111		
	U								
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	87	79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	87	75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	98	79-112		
Carbazole	17	U	17.	170	ug/kg	101	77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	90	74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	83	10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	89	70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	83	70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	84	68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	75	67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	90	72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	96	79-110		
Chrysene	17	U	17.	170	ug/kg	97	76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	87	70-128		
Dibenzofuran	17	U	17.	170	ug/kg	89	79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	86	79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	86	70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	85	74-106		
3,3'-Dichlorobenzidine	100		100.	330	ug/kg	80	38-105		
	U								
2,4-Dichlorophenol	17	U	17.	170	ug/kg	93	75-111		
Diethylphthalate	17	U	17.	170	ug/kg	91	76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	87	72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	100	70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	91	77-109		
4,6-Dinitro-2-methylphenol	170		170.	500	ug/kg	98	53-110		
	U								
2,4-Dinitrophenol	670		670.	2,000	ug/kg	95	37-120		
	U								
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	93	73-115		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	91		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	92		77-111		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	94		75-117		
Fluoranthene	17 U	17.	170	ug/kg	105		78-116		
Fluorene	17 U	17.	170	ug/kg	92		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	98		78-116		
Hexachlorobutadiene	67 U	67.	170	ug/kg	86		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	93		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	81		68-105		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	88		64-119		
Isophorone	17 U	17.	170	ug/kg	88		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	93		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	86		76-105		
2-Methylphenol	33 U	33.	170	ug/kg	90		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	96		66-117		
Naphthalene	17 U	17.	170	ug/kg	90		73-106		
2-Nitroaniline	17 U	17.	170	ug/kg	99		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	92		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	86		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	81		71-104		
2-Nitrophenol	17 U	17.	170	ug/kg	94		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	59		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	79		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	91		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	97		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	85		68-130		
Pentachlorophenol	170 U	170.	500	ug/kg	80		35-106		
Phenanthrene	17 U	17.	170	ug/kg	94		77-113		
Phenol	17 U	17.	170	ug/kg	89		58-112		
Pyrene	17 U	17.	170	ug/kg	87		75-115		
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	89		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	93		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	87		78-111		
Batch number: 10355SLE026 Sample number(s): 6167468-6167483, 6167485-6167490									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	85		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	90		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	89		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	93		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	89		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	103		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	91		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	90		66-137		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	99		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	100		84-132		
Chrysene	0.33 U	0.33	1.7	ug/kg	90		79-120		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	91		62-142		
Diethylphthalate	6.0 U	6.0	18	ug/kg	83		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	95		70-130		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	109		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	92		78-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	95		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	92		62-141		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	88		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	78		62-120		

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

<u>Analysis Name</u>	<u>Blank Result</u>		<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Naphthalene	0.67	U	0.67	1.7	ug/kg	84		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	92		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	94		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	88		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	95		56-121		
Batch number: 103620012A	Sample number(s): 6167468-6167483, 6167485-6167490									
2,4-D	1.2	U	1.2	3.6	ug/kg	104		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	72		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	90		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	92		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	5*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	109		60-141		
MCPA	76	U	76	250	ug/kg	111		34-113		
MCPP (Mecoprop)	75	U	75	250	ug/kg	120		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	102		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	82		48-138		
Batch number: 110040016A	Sample number(s): 6167468, 6167472									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	105		85-115		
Batch number: 103560034A	Sample number(s): 6167468-6167483, 6167485-6167490									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	68*	61*	75-125	10	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	116		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	133		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103610030A	Sample number(s): 6167468-6167483, 6167485-6167490									
Aldrin	0.066	U	0.066	0.17	ug/kg	118		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	79		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	84		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	82		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	93		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	129		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	89		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	88		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	89		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	85		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	118		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	132		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	91		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	92		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	115		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	94		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	124		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	89		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 103541026002A	Sample number(s): 6167468-6167490								
Antimony	0.0600 U	0.0600	0.200	mg/kg	93		11-208		
Arsenic	0.0600 U	0.0600	0.400	mg/kg	96		80-120		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	96		82-118		
Cadmium	0.0360 U	0.0360	0.100	mg/kg	98		82-118		
Chromium	0.120 U	0.120	0.400	mg/kg	102		80-120		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	95		82-118		
Copper	0.111 J	0.0660	0.400	mg/kg	95		80-120		
Lead	0.0104 U	0.0104	0.200	mg/kg	93		80-120		
Nickel	0.100 U	0.100	0.400	mg/kg	103		80-120		
Silver	0.0120 U	0.0120	0.100	mg/kg	95		66-134		
Thallium	0.0300 U	0.0300	0.100	mg/kg	97		81-119		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	95		90-110		
Zinc	0.560 U	0.560	3.00	mg/kg	96		78-122		
Batch number: 103541026002B	Sample number(s): 6167468-6167490								
Selenium	0.0400 U	0.0400	0.400	mg/kg	90		79-122		
Batch number: 103541026002C	Sample number(s): 6167468-6167490								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	107		78-122		
Batch number: 103541026002D	Sample number(s): 6167468-6167490								
Barium	0.108 U	0.108	0.400	mg/kg	100		79-121		
Batch number: 103545708002	Sample number(s): 6167468-6167490								
Aluminum	4.84 U	4.84	19.2	mg/kg	90		61-110		
Boron	0.856 U	0.856	4.81	mg/kg	87		78-110		
Calcium	5.92 J	5.89	19.2	mg/kg	92		88-110		
Iron	4.53 U	4.53	19.2	mg/kg	89		61-110		
Lithium	0.21 U	0.21	1.9	mg/kg	101		80-120		
Magnesium	2.44 U	2.44	9.62	mg/kg	90		82-110		
Manganese	0.0750 U	0.0750	0.481	mg/kg	94		81-119		
Phosphorus	1.80 J	0.538	9.62	mg/kg	103		80-120		
Potassium	17.3 U	17.3	48.1	mg/kg	90		78-110		
Sodium	35.9 U	35.9	96.2	mg/kg	91		87-110		
Strontium	0.0596 U	0.0596	0.481	mg/kg	97		79-121		
Tin	1.23 J	0.962	9.62	mg/kg	93		90-114		
Titanium	0.365 U	0.365	0.962	mg/kg	94		80-120		
Zirconium	0.808 U	0.808	4.81	mg/kg	101		80-120		
Batch number: 103575711001	Sample number(s): 6167468-6167490								
Mercury	0.0027 U	0.0027	0.0933	mg/kg	95		88-123		
Batch number: 11007007205A	Sample number(s): 6167468-6167477								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	107		90-110		
Batch number: 11007007205B	Sample number(s): 6167478-6167482, 6167484-6167490								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	107		90-110		
Batch number: 11011011201A	Sample number(s): 6167468-6167477								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	102		85-115		
Batch number: 11011011201B	Sample number(s): 6167478-6167482, 6167484-6167490								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	102		85-115		
Batch number: 11013243202A	Sample number(s): 6167468-6167482, 6167484-6167490								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	97		80-120		

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 10354039401A 22a pH by 9045C	Sample number(s): 6167468-6167477				100		95-105		
Batch number: 10354039401B 22a pH by 9045C	Sample number(s): 6167478-6167481, 6167484-6167490				100		95-105		
Batch number: 10354182101A Oxidation Reduction Potential	Sample number(s): 6167468-6167477				99		98-102		
Batch number: 10354182101B Oxidation Reduction Potential	Sample number(s): 6167478-6167481, 6167484-6167490				99		98-102		
Batch number: 10357162402A 28a Moisture Content by 160.3	Sample number(s): 6167468-6167479				100		80-120		
Batch number: 10357162402B 28a Moisture Content by 160.3	Sample number(s): 6167480-6167490				100		80-120		
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 10355SLB026	Sample number(s): 6167468-6167483, 6167485-6167490 UNSPK: 6167481								
Acenaphthene	88	88	75-115	0	30				
Acenaphthylene	90	94	49-126	4	30				
Aniline	37	26	14-114	34*	30				
Anthracene	92	92	75-115	1	30				
Benzidine	0*	0*	35-141	0	30				
Benzo(a)anthracene	90	95	65-122	5	30				
Benzo(a)pyrene	82	87	57-126	6	30				
Benzo(b)fluoranthene	81	85	59-125	4	30				
Benzo(g,h,i)perylene	78	79	59-127	2	30				
Benzo(k)fluoranthene	79	84	56-132	6	30				
Benzoic acid	45	20	10-173	78*	30				
Benzyl alcohol	94	91	55-123	3	30				
4-Bromophenyl-phenylether	88	89	67-129	2	30				
Butylbenzylphthalate	82	86	73-134	5	30				
Di-n-butylphthalate	99	94	67-123	6	30				
Carbazole	97	98	64-120	0	30				
4-Chloro-3-methylphenol	85	86	53-130	2	30				
4-Chloroaniline	49	44	23-95	11	30				
bis(2-Chloroethoxy)methane	85	85	54-117	0	30				
bis(2-Chloroethyl)ether	87	86	60-116	1	30				
bis(2-Chloroisopropyl)ether	81	79	55-142	3	30				
2-Chloronaphthalene	70	72	50-141	2	30				
2-Chlorophenol	89	88	73-121	0	30				
4-Chlorophenyl-phenylether	91	96	64-119	5	30				
Chrysene	92	98	62-128	6	30				
Dibenz(a,h)anthracene	81	83	65-125	2	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dibenzofuran	88	92	71-112	5	30				
1,2-Dichlorobenzene	84	84	66-108	0	30				
1,3-Dichlorobenzene	85	82	63-109	4	30				
1,4-Dichlorobenzene	86	82	53-113	5	30				
3,3'-Dichlorobenzidine	52	47	25-123	11	30				
2,4-Dichlorophenol	89	91	78-117	1	30				
Diethylphthalate	85	91	66-118	7	30				
2,4-Dimethylphenol	82	75	56-130	9	30				
3,5-Dimethylphenol	96	93	70-130	3	30				
Dimethylphthalate	87	91	64-118	5	30				
4,6-Dinitro-2-methylphenol	90	79	10-148	12	30				
2,4-Dinitrophenol	58	51	20-143	14	30				
2,4-Dinitrotoluene	87	92	57-114	5	30				
2,6-Dinitrotoluene	88	92	69-123	5	30				
1,2-Diphenylhydrazine	90	87	71-129	4	30				
bis(2-Ethylhexyl)phthalate	94	96	63-122	2	30				
Fluoranthene	109	102	59-122	7	30				
Fluorene	87	92	60-125	5	30				
Hexachlorobenzene	97	94	61-111	3	30				
Hexachlorobutadiene	78	82	62-120	4	30				
Hexachlorocyclopentadiene	84	89	10-153	6	30				
Hexachloroethane	77	76	57-109	1	30				
Indeno(1,2,3-cd)pyrene	82	83	61-126	1	30				
Isophorone	84	83	51-118	1	30				
1-Methylnaphthalene	88	87	73-112	1	30				
2-Methylnaphthalene	80	83	76-114	3	30				
2-Methylphenol	90	86	47-142	5	30				
4-Methylphenol	95	89	55-126	7	30				
Naphthalene	84	86	72-116	2	30				
2-Nitroaniline	97	96	67-125	1	30				
3-Nitroaniline	77	79	59-122	3	30				
4-Nitroaniline	76	75	52-112	0	30				
Nitrobenzene	78	78	51-114	0	30				
2-Nitrophenol	86	89	74-115	4	30				
4-Nitrophenol	63	60	39-133	5	30				
N-Nitroso-di-n-propylamine	81	77	60-116	6	30				
N-Nitrosodimethylamine	93	94	47-116	1	30				
N-Nitrosodiphenylamine	92	87	86-145	5	30				
Di-n-octylphthalate	85	85	56-126	0	30				
Pentachlorophenol	82	76	17-149	8	30				
Phenanthrene	90	88	65-125	2	30				
Phenol	89	87	58-126	3	30				
Pyrene	79	83	51-151	4	30				
1,2,4-Trichlorobenzene	82	84	72-115	3	30				
2,4,5-Trichlorophenol	87	92	34-139	7	30				
2,4,6-Trichlorophenol	86	90	49-140	4	30				

Batch number: 10355SLE026 Sample number(s): 6167468-6167483, 6167485-6167490 UNSPK: 6167481

Acenaphthene	83	82	63-105	1	30
Acenaphthylene	88	88	55-126	0	30
Anthracene	92	88	46-136	4	30
Benzo(a)anthracene	93	91	39-144	2	30
Benzo(a)pyrene	86	85	34-156	1	30

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(b)fluoranthene	114	119	43-155	5	30				
Benzo(g,h,i)perylene	46	48	33-141	4	30				
Benzo(k)fluoranthene	90	88	42-144	2	30				
Butylbenzylphthalate	104	97	73-140	8	30				
Di-n-butylphthalate	104	103	78-160	1	30				
Chrysene	95	87	29-156	8	30				
Dibenz(a,h)anthracene	53	59	41-130	10	30				
Diethylphthalate	81*	81*	87-131	0	30				
Dimethylphthalate	93	91	74-118	3	30				
Bis(2-Ethylhexyl)phthalate	169*	115	39-167	37*	30				
Fluoranthene	108	94	26-166	13	30				
Fluorene	91	90	45-121	1	30				
Indeno(1,2,3-cd)pyrene	52	56	21-143	8	30				
1-Methylnaphthalene	91	87	72-123	5	30				
2-Methylnaphthalene	82	78	28-121	4	30				
Naphthalene	88	83	61-102	6	30				
N-Nitrosodimethylamine	97	94	48-113	3	30				
Di-n-octylphthalate	128	111	40-192	15	30				
Phenanthrene	98	87	12-165	12	30				
Pyrene	96	87	15-153	10	30				

Batch number: 103620012A	Sample number(s): 6167468-6167483,6167485-6167490 UNSPK: 6167481								
2,4-D	93	69	28-161	30	35				
Dalapon	0*	24	12-86	200*	50				
2,4-DB	108	273*	20-170	87*	50				
Dicamba	65	148*	33-120	52*	50				
Dinoseb	6	16	1-44	85*	35				
2,4-DP (Dichlorprop)	115	116	55-141	1	50				
MCPA	149	160	31-184	7	50				
MCPP (Mecoprop)	0*	111	16-174	200*	50				
2,4,5-T	83	108	25-132	26	35				
2,4,5-TP	117	105	10-183	11	35				

Batch number: 110040016A	Sample number(s): 6167468,6167472 UNSPK: 6167468								
6a Perchlorate EPA 6850	110	110	80-120	0	20				

Batch number: 103560034A	Sample number(s): 6167468-6167483,6167485-6167490 UNSPK: 6167481								
PCB-1016	132	112	29-146	16	50				
PCB-1260	141	131	39-149	8	50				

Batch number: 103610030A	Sample number(s): 6167468-6167483,6167485-6167490 UNSPK: 6167481								
Aldrin	97	94	16-126	3	50				
Alpha BHC	109	64	10-129	53*	50				
Beta BHC	81	75	14-147	8	50				
Gamma BHC - Lindane	112	73	10-140	43	50				
p,p-DDD	97	100	16-163	3	50				
p,p-DDE	135	166*	18-161	20	50				
p,p-DDT	117	129	10-176	10	50				
Delta BHC	75	72	23-140	4	50				
Dieldrin	77	80	19-154	4	50				
Endosulfan I	67	73	16-137	9	50				
Endosulfan II	108	111	28-154	3	50				
Endosulfan Sulfate	117	111	21-160	5	50				

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Endrin	80	80	11-149	0	50				
Endrin Aldehyde	58	59	10-148	3	35				
Endrin Ketone	94	77	22-165	19	50				
Heptachlor	73	73	13-126	0	50				
Heptachlor Epoxide	103	109	13-157	6	50				
Methoxychlor	63	63	32-147	0	50				
Batch number: 103541026002A	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Antimony	62*	56*	75-125	8	20	0.197 J	0.217	10 (1)	20
Arsenic	299*	300*	75-125	0	20	5.09	7.29	36*	20
Beryllium	188*	198*	75-125	3	20	0.589	0.770	27*	20
Cadmium	181*	179*	75-125	2	20	0.214	0.303	34* (1)	20
Chromium	213*	238*	75-125	5	20	19.0	25.4	29*	20
Cobalt	137*	142*	75-125	2	20	6.09	7.47	20	20
Copper	156*	167*	75-125	3	20	10.1	12.4	21*	20
Lead	290 (2)	369 (2)	75-125	10	20	12.8	16.9	27*	20
Nickel	183*	192*	75-125	2	20	12.8	16.5	25*	20
Silver	163*	167*	75-125	2	20	0.0934 J	0.100	7 (1)	20
Thallium	184*	185*	75-125	0	20	0.333	0.389	16 (1)	20
Vanadium	289*	314*	75-125	3	20	35.4	45.2	24*	20
Zinc	354 (2)	384 (2)	75-125	3	20	53.4	72.4	30*	20
Batch number: 103541026002B	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Selenium	91	91	75-125	0	20	0.133 J	0.116 J	14 (1)	20
Batch number: 103541026002C	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Molybdenum	169*	177*	75-125	3	20	0.781	0.911	15	20
Batch number: 103541026002D	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Barium	599 (2)	627 (2)	75-125	1	20	110	141	24*	20
Batch number: 103545708002	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Aluminum	1508 (2)	1850 (2)	75-125	4	20	13,300	13,000	2	20
Boron	93	91	84-115	0	20	3.82 J	3.78 J	1 (1)	20
Calcium	86 (2)	136 (2)	75-125	6	20	2,900	2,480	16	20
Iron	-871 (2)	1520 (2)	75-125	13	20	17,400	15,700	11	20
Lithium	100	98	82-114	0	20	15.4	14.8	4	20
Magnesium	156 (2)	302 (2)	75-125	8	20	3,130	3,050	2	20
Manganese	62 (2)	174 (2)	75-125	15	20	316	325	3	20
Phosphorus	64*	92	75-125	10	20	226	192	16	20
Potassium	123	144*	75-125	6	20	2,670	2,590	3	20
Sodium	98	95	75-125	1	20	84.7 J	81.4 J	4 (1)	20
Strontium	98	98	75-115	1	20	21.3	20.1	6	20
Tin	90	89	80-110	0	20	2.15 J	2.12 J	1 (1)	20
Titanium	288 (2)	359 (2)	75-125	5	20	1,090	1,060	3	20
Zirconium	93	93	75-125	1	20	2.01 J	2.39 J	17 (1)	20
Batch number: 103575711001	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Mercury	111	101	65-135	12	20	0.0028 U	0.0027 U	0 (1)	20
Batch number: 11007007205A	Sample number(s): 6167468-6167477 UNSPK: 6167477 BKG: 6167477								

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
11a Anions by 300.0 - Fluoride	82		80-120			1.5	1.0	38* (1)	20
Batch number: 11007007205B	Sample number(s): 6167478-6167482, 6167484-6167490 UNSPK: 6167481 BKG: 6167481								
11a Anions by 300.0 - Fluoride	77*		80-120			2.5	2.3	4 (1)	20
Batch number: 11011011201A	Sample number(s): 6167468-6167477 UNSPK: 6167468 BKG: 6167468								
7a Perchlorate EPA 314.0	104		80-120			9.0	U 9.0	0 (1)	15
Batch number: 11011011201B	Sample number(s): 6167478-6167482, 6167484-6167490 UNSPK: 6167481 BKG: 6167481								
7a Perchlorate EPA 314.0	99		80-120			9.0	U 9.0	0 (1)	15
Batch number: 11013243202A	Sample number(s): 6167468-6167482, 6167484-6167490 UNSPK: 6167481 BKG: 6167481								
3a Cr VI by EPA 7199	80		75-125			0.54	J 0.53	2 (1)	20
Batch number: 10354039401A	Sample number(s): 6167468-6167477 BKG: 6167468								
22a pH by 9045C						7.19	7.24	1	1
Batch number: 10354039401B	Sample number(s): 6167478-6167481, 6167484-6167490 BKG: 6167481								
22a pH by 9045C						7.23	7.14	1	1
Batch number: 10354182101A	Sample number(s): 6167468-6167477 BKG: 6167468								
Oxidation Reduction Potential						437	427	2	6
Batch number: 10354182101B	Sample number(s): 6167478-6167481, 6167484-6167490 BKG: 6167481								
Oxidation Reduction Potential						448	463	3	6
Batch number: 10357162402A	Sample number(s): 6167468-6167479 BKG: 6167471								
28a Moisture Content by 160.3						25.8	24.4	6	20
Batch number: 10357162402B	Sample number(s): 6167480-6167490 BKG: 6167481								
28a Moisture Content by 160.3						6.9	6.8	2	20
28a Moisture Content by 160.3						6.9	6.8	2	20
28a Moisture Content by 160.3						6.9	6.8	2	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 10355SLB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6167468	89	88	89	77	88	66
6167469	89	90	94	78	88	67
6167470	87	87	88	70	82	73
6167471	89	84	99	78	89	67
6167472	81	80	90	73	85	70
6167473	86	82	88	75	83	66
6167474	88	83	86	74	85	70

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

Surrogate Quality Control

6167475	77	77	77	69	79	68
6167476	89	84	87	75	88	80
6167477	89	82	89	78	87	77
6167478	85	76	92	74	84	71
6167479	84	83	86	78	89	66
6167480	86	83	85	76	89	83
6167481	88	89	92	80	83	76
6167482	89	91	92	75	88	72
6167483	91	89	94	77	85	73
6167485	85	79	86	79	89	79
6167486	86	82	83	75	87	80
6167487	84	81	85	75	90	80
6167488	88	90	80	80	88	84
6167489	90	90	87	80	88	82
6167490	87	92	82	81	87	82
Blank	90	94	102	82	85	78
LCS	90	91	98	79	87	74
MS	89	91	92	75	88	72
MSD	91	89	94	77	85	73

Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM

Batch number: 10355SLE026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6167468	90	78	76
6167469	92	83	84
6167470	91	81	86
6167471	91	80	80
6167472	94	85	87
6167473	96	85	84
6167474	96	84	85
6167475	90	83	84
6167476	98	83	85
6167477	92	84	86
6167478	91	83	83
6167479	98	85	86
6167480	91	80	93
6167481	93	85	87
6167482	90	80	81
6167483	85	78	83
6167485	89	79	83
6167486	93	83	85
6167487	96	85	92
6167488	83	72	67
6167489	115	75	88
6167490	86	76	75
Blank	86	80	88
LCS	91	83	90
MS	90	80	81
MSD	85	78	83

Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 103560034A

Tetrachloro-m-xylene	Decachlorobiphenyl

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

Surrogate Quality Control

6167468	91	105
6167469	82	89
6167470	95	95
6167471	75	78
6167472	107	97
6167473	78	89
6167474	104	101
6167475	85	84
6167476	110	108
6167477	100	262*
6167478	89	145*
6167479	96	110
6167480	110	58
6167481	108	118
6167482	121	125*
6167483	100	114
6167485	137	91
6167486	94	87
6167487	118	105
6167488	111	96
6167489	151*	124*
6167490	83	60
Blank	140*	99
LCS	120	100
LCSD	92	95
MS	121	125*
MSD	100	114

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 103610030A

Tetrachloro-m-xylene Decachlorobiphenyl

6167468	67	188*
6167469	51	241*
6167470	48*	83
6167471	75	190*
6167472	76	176*
6167473	75	79
6167474	68	78
6167475	55	52
6167476	52	68
6167477	56	0*
6167478	88	216*
6167479	90	87
6167480	101	0*
6167481	69	77
6167482	63	50
6167483	68	80
6167485	62	0*
6167486	76	0*
6167487	54	0*
6167488	68	81
6167489	52	29
6167490	63	289*
Blank	76	103

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/03/11 at 04:12 PM

Group Number: 1225974

Surrogate Quality Control

LCS	84	111
MS	63	50
MSD	68	80

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103620012A
2,4-Dichlorophenylacetic
acid

6167468	107
6167469	93
6167470	130
6167471	82
6167472	92
6167473	76
6167474	79
6167475	83
6167476	115
6167477	97
6167478	42
6167479	64
6167480	103
6167481	88
6167482	106
6167483	79
6167485	122
6167486	87
6167487	125
6167488	70
6167489	105
6167490	107
Blank	100
LCS	104
MS	106
MSD	79

Limits: 36-156

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

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13013

1225974

6167468-90

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD															Other Instructions and Notes									
NOTES:																														
*Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP																														
Signatures: <i>[Handwritten signatures]</i> Samplers: <i>[Signature]</i>																														
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOC/EPA 8260	1,4-Dioxane EPA 8260/816	SVOC EPA 8270 & PAHs EPA 8270-SIM	TPH-EPA 8015B	TPH-EPA 8015B Mod.	*Hex Chrome EPA 7159*	*Fluoride EPA 300.0	*FCB EPA 8082	*Dioxin/Furan EPA 1631B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 8850	*Pesticides EPA 8081.2 (surface soil only)	*Herbicides EPA 8151 (surface soil only)	*Nitrates EPA 300.0	**Formaldehyde EPA 8151A	**HIDMA EPA 1625C	**Enegals EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B			
DUP07-SASB-QC-121610	12.16.10	1129	soil	none	1 x 16 oz. jar & 1 6" sleeve																								DUP	
EB04-SASB-121610	12.16.10	1215	water	none	6-1 liter ambers																								rinsate	
EB04-SASB-121610	12.16.10	1215	water	none	1-500 ml poly																								rinsate	
EB04-SASB-121610	12.16.10	1215	water	HNO3	1-500 ml poly																								rinsate	
EB16-SASB-121610	12.16.10	1120	water	none	4-40 mL clear VOA vials														X										rinsate	
EB16-SASB-121610	12.16.10	1120	water	HCl	3-40 mL clear VOA vials																								rinsate	
EB16-SASB-121610	12.16.10	1120	water	none	1-250 mL glass															X									rinsate	
EB16-SASB-121610	12.16.10	1120	water	none	4-1 liter ambers																X	X							rinsate	
EB16-SASB-121610	12.16.10	1120	water	none	1-250 mL amber																			X					rinsate	
EB16-SASB-121610	12.16.10	1120	water	NaOH	1-500 mL poly																		X						rinsate	
SED-011-SIV-SO-0.0-0.5	12.16.10	1418	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X												
SED-013-SIV-SO-0.0-0.5	12.16.10	1526	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X												
SED-017-SIV-SO-0.0-0.5	12.16.10	1045	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X												
SED-019-SIV-SO-0.0-0.5	12.16.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X												
SED-020-SIV-SO-0.0-0.5	12.16.10	1140	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X												
SL-040-SASB-SB-1.5-2.5	12.16.10	1007	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X		
SL-040-SASB-SB-2.0	12.16.10	1004	soil	none	5 Encore Samplers		X	X		X																				
SL-040-SASB-SB-9.0-10.0	12.16.10	1015	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X		
SL-040-SASB-SB-9.5	12.16.10	1011	soil	none	5 Encore Samplers		X	X		X																				
SL-041-SASB-SB-1.5-2.5	12.16.10	1144	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X			
SL-041-SASB-SB-2.0	12.16.10	1140	soil	none	5 Encore Samplers		X	X		X																				
SL-041-SASB-SB-8.5	12.16.10	1148	soil	none	5 Encore Samplers		X	X		X																				
SL-041-SASB-SB-8.0-9.0	12.16.10	1155	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X			
SL-042-SASB-SB-2.5-3.5	12.16.10	1410	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X			
SL-042-SASB-SB-3.0	12.16.10	1404	soil	none	5 Encore Samplers		X	X		X																				
SL-042-SASB-SB-8.0-9.0	12.16.10	1418	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X			
SL-042-SASB-SB-8.5	12.16.10	1413	soil	none	5 Encore Samplers		X	X		X																				
SL-043-SASB-SB-2.5-3.5	12.16.10	1549	soil	none	3 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X			
SL-043-SASB-SB-3.0	12.16.10	1545	soil	none	5 Encore Samplers		X	X		X																				
SL-147-SASB-S5-0.0-0.5	12.16.10	0855	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-169-SASB-S5-0.0-0.5	12.16.10	1337	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-172-SASB-S5-0.0-0.5	12.16.10	1352	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-173-SASB-S5-0.0-0.5	12.16.10	1312	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-176-SASB-S5-0.0-0.5	12.16.10	0925	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-178-SASB-S5-0.0-0.5	12.16.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-186-SASB-S5-0.0-0.5	12.16.10	1056	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-187-SASB-S5-0.0-0.5	12.16.10	1119	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-189-SASB-S5-0.0-0.5MS	12.16.10	1125	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X			X	X										MS/MSD
SL-192-SASB-S5-0.0-0.5	12.16.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-194-SASB-S5-0.0-0.5	12.16.10	1340	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-196-SASB-S5-0.0-0.5	12.16.10	1312	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-198-SASB-S5-0.0-0.5	12.16.10	1059	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-199-SASB-S5-0.0-0.5	12.16.10	1323	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-202-SASB-S5-0.0-0.5	12.16.10	1423	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-205-SASB-S5-0.0-0.5	12.16.10	1432	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-284-SASB-S5-0.0-0.5	12.16.10	1413	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-285-SASB-S5-0.0-0.5	12.16.10	0920	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-286-SASB-S5-0.0-0.5	12.16.10	0902	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-304-SASB-S5-0.0-0.5	12.16.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
SL-305-SASB-S5-0.0-0.5	12.16.10	1450	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X										
TB-121610	12.16.10	0800	water	HCl	4-40 mL clear VOA vials		X	X		X																				trip blank

Received by: *[Signature]*
 Date/Time: 12.16.10 1700
 Received by: *[Signature]*
 Date/Time: 12/17/10 940
 Lab No.: 00732992

Laboratory: Lancaster Laboratories, Inc.
 No. of coolers = 6

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 21, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/17/2010

Group Number: 1225976

SDG: DX026

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SED-011-SIV-SD-0.0-0.5 Sediment	6167492
SED-013-SIV-SD-0.0-0.5 Sediment	6167493
SED-017-SIV-SD-0.0-0.5 Sediment	6167494
SED-019-SIV-SD-0.0-0.5 Sediment	6167495
SED-020-SIV-SD-0.0-0.5 Sediment	6167496
SL-147-SA5B-SS-0.0-0.5 Soil	6167497
SL-169-SA5B-SS-0.0-0.5 Soil	6167498
SL-172-SA5B-SS-0.0-0.5 Soil	6167499
SL-173-SA5B-SS-0.0-0.5 Soil	6167500
SL-176-SA5B-SS-0.0-0.5 Soil	6167501
SL-178-SA5B-SS-0.0-0.5 Soil	6167502
SL-186-SA5B-SS-0.0-0.5 Soil	6167503
SL-187-SA5B-SS-0.0-0.5 Soil	6167504
SL-189-SA5B-SS-0.0-0.5 Soil	6167505
SL-189-SA5B-SS-0.0-0.5MS Soil	6167506
SL-189-SA5B-SS-0.0-0.5MSD Soil	6167507
SL-192-SA5B-SS-0.0-0.5 Soil	6167508
SL-194-SA5B-SS-0.0-0.5 Soil	6167509
SL-196-SA5B-SS-0.0-0.5 Soil	6167510
SL-198-SA5B-SS-0.0-0.5 Soil	6167511
SL-199-SA5B-SS-0.0-0.5 Soil	6167512
SL-202-SA5B-SS-0.0-0.5 Soil	6167513

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Charles J. Neslund
Manager



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SED-011-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167492
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD011 SDG#: DX026-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-011-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167492
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD011 SDG#: DX026-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.120 J	0.0259	1.10	1
11031	12378-PeCDD	40321-76-4	0.432 JB	0.0523	5.51	1
11031	123478-HxCDD	39227-28-6	0.511 JB	0.0213	5.51	1
11031	123678-HxCDD	57653-85-7	1.40 JB	0.0225	5.51	1
11031	123789-HxCDD	19408-74-3	1.06 JB	0.0219	5.51	1
11031	1234678-HpCDD	35822-46-9	32.2 B	0.0462	5.51	1
11031	OCDD	3268-87-9	314 B	0.0649	11.0	1
11031	2378-TCDF	51207-31-9	0.219 JB	0.0351	1.10	1
11031	12378-PeCDF	57117-41-6	0.307 JB	0.0160	5.51	1
11031	23478-PeCDF	57117-31-4	0.515 JB	0.0161	5.51	1
11031	123478-HxCDF	70648-26-9	0.391 JB	0.0192	5.51	1
11031	123678-HxCDF	57117-44-9	0.342 JB	0.0173	5.51	1
11031	123789-HxCDF	72918-21-9	0.132 JB	0.0209	5.51	1
11031	234678-HxCDF	60851-34-5	0.436 JB	0.0191	5.51	1
11031	1234678-HpCDF	67562-39-4	5.49 JB	0.0166	5.51	1
11031	1234789-HpCDF	55673-89-7	0.462 JB	0.0233	5.51	1
11031	OCDF	39001-02-0	10.8 JB	0.0277	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	55	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	48	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-011-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167492
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD011 SDG#: DX026-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-011-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167492
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD011 SDG#: DX026-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 04:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Sample Description: SED-013-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167493
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD013 SDG#: DX026-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.0	0.50	0.50	1

Sample Description: SED-013-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167493
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD013 SDG#: DX026-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0815 JQ	0.0213	1.15	1
11031	12378-PeCDD	40321-76-4	0.847 JBQ	0.0495	5.75	1
11031	123478-HxCDD	39227-28-6	1.48 JB	0.0316	5.75	1
11031	123678-HxCDD	57653-85-7	3.74 JB	0.0328	5.75	1
11031	123789-HxCDD	19408-74-3	3.00 JB	0.0314	5.75	1
11031	1234678-HpCDD	35822-46-9	93.0 B	0.0838	5.75	1
11031	OCDD	3268-87-9	869 B	0.0698	11.5	1
11031	2378-TCDF	51207-31-9	0.355 JB	0.0380	1.15	1
11031	12378-PeCDF	57117-41-6	0.551 JB	0.0180	5.75	1
11031	23478-PeCDF	57117-31-4	0.680 JB	0.0182	5.75	1
11031	123478-HxCDF	70648-26-9	0.855 JB	0.0260	5.75	1
11031	123678-HxCDF	57117-44-9	0.743 JB	0.0234	5.75	1
11031	123789-HxCDF	72918-21-9	0.259 JB	0.0272	5.75	1
11031	234678-HxCDF	60851-34-5	0.972 JB	0.0254	5.75	1
11031	1234678-HpCDF	67562-39-4	14.3 B	0.0260	5.75	1
11031	1234789-HpCDF	55673-89-7	1.11 JB	0.0385	5.75	1
11031	OCDF	39001-02-0	28.3 B	0.0289	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	57	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	50	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: **SED-013-SIV-SD-0.0-0.5** **Sediment**
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167493
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD013 SDG#: DX026-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-013-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167493
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD013 SDG#: DX026-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 05:36	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SED-017-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167494
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD017 SDG#: DX026-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	11.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167494
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD017 SDG#: DX026-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.190	J	0.0263	1
11031	12378-PeCDD	40321-76-4	0.963	JB	0.0547	1
11031	123478-HxCDD	39227-28-6	4.07	JB	0.0350	1
11031	123678-HxCDD	57653-85-7	15.1	B	0.0363	1
11031	123789-HxCDD	19408-74-3	5.15	JB	0.0353	1
11031	1234678-HpCDD	35822-46-9	419	B	0.139	1
11031	OCDD	3268-87-9	3,550	B	0.119	1
11031	2378-TCDF	51207-31-9	0.501	JB	0.0533	1
11031	12378-PeCDF	57117-41-6	0.661	JB	0.0247	1
11031	23478-PeCDF	57117-31-4	1.11	JB	0.0245	1
11031	123478-HxCDF	70648-26-9	1.31	JB	0.0347	1
11031	123678-HxCDF	57117-44-9	1.35	JB	0.0314	1
11031	123789-HxCDF	72918-21-9	0.332	JB	0.0388	1
11031	234678-HxCDF	60851-34-5	2.20	JB	0.0345	1
11031	1234678-HpCDF	67562-39-4	38.5	B	0.0438	1
11031	1234789-HpCDF	55673-89-7	3.16	JB	0.0563	1
11031	OCDF	39001-02-0	82.4	B	0.0356	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-017-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167494
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD017 SDG#: DX026-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-017-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167494
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD017 SDG#: DX026-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 06:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-019-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167495
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD019 SDG#: DX026-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	25.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167495
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD019 SDG#: DX026-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	2.18 Q	0.107	1.35	1
11031	12378-PeCDD	40321-76-4	4.86 JBQ	0.240	6.74	1
11031	123478-HxCDD	39227-28-6	16.0 B	0.173	6.74	1
11031	123678-HxCDD	57653-85-7	62.8 B	0.173	6.74	1
11031	123789-HxCDD	19408-74-3	26.7 B	0.177	6.74	1
11031	1234678-HpCDD	35822-46-9	1,720 B	0.713	6.74	1
11031	OCDD	3268-87-9	24,600 EB	0.396	13.5	1
11031	2378-TCDF	51207-31-9	8.60 B	0.220	1.35	1
11650	2378-TCDF-Conf	51207-31-9	9.59 B	0.123	1.35	1
11031	12378-PeCDF	57117-41-6	18.1 B	0.0740	6.74	1
11031	23478-PeCDF	57117-31-4	9.60 B	0.0708	6.74	1
11031	123478-HxCDF	70648-26-9	11.8 B	0.150	6.74	1
11031	123678-HxCDF	57117-44-9	11.4 B	0.138	6.74	1
11031	123789-HxCDF	72918-21-9	2.48 JB	0.153	6.74	1
11031	234678-HxCDF	60851-34-5	13.7 B	0.138	6.74	1
11031	1234678-HpCDF	67562-39-4	239 B	0.165	6.74	1
11031	1234789-HpCDF	55673-89-7	21.9 B	0.196	6.74	1
11031	OCDF	39001-02-0	703 B	0.148	13.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-2378-TCDF-Conf	79	24 - 169
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	74	21 - 178

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167495
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD019 SDG#: DX026-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-123478-HxCDF	80	26 - 152			
	13C12-123678-HxCDF	82	26 - 123			
	13C12-234678-HxCDF	83	28 - 136			
	13C12-123789-HxCDF	82	29 - 147			
	13C12-1234678-HpCDF	79	28 - 143			
	13C12-1234789-HpCDF	80	26 - 138			
	13C12-0CDF	79	17 - 157			
	13C12-1278-TCDD (CRS)	79	35 - 197			

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

Sample Description: SED-019-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167495
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD019 SDG#: DX026-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 18:28	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11008001	02/04/2011 16:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SED-020-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167496
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD020 SDG#: DX026-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	8.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167496
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD020 SDG#: DX026-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.284	JQ	0.0353	1
11031	12378-PeCDD	40321-76-4	1.07	JB	0.0914	1
11031	123478-HxCDD	39227-28-6	2.51	JB	0.0601	1
11031	123678-HxCDD	57653-85-7	10.9	B	0.0630	1
11031	123789-HxCDD	19408-74-3	5.57	B	0.0609	1
11031	1234678-HpCDD	35822-46-9	293	B	0.214	1
11031	OCDD	3268-87-9	2,980	B	0.143	1
11031	2378-TCDF	51207-31-9	0.492	JBQ	0.0529	1
11031	12378-PeCDF	57117-41-6	0.971	JB	0.0286	1
11031	23478-PeCDF	57117-31-4	0.802	JB	0.0286	1
11031	123478-HxCDF	70648-26-9	1.31	JB	0.0466	1
11031	123678-HxCDF	57117-44-9	1.40	JB	0.0440	1
11031	123789-HxCDF	72918-21-9	0.322	JB	0.0536	1
11031	234678-HxCDF	60851-34-5	2.26	JB	0.0448	1
11031	1234678-HpCDF	67562-39-4	36.6	B	0.158	1
11031	1234789-HpCDF	55673-89-7	4.32	JBQ	0.210	1
11031	OCDF	39001-02-0	87.8	B	0.0850	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	90	26 - 152
13C12-123678-HxCDF	92	26 - 123
13C12-234678-HxCDF	89	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	83	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-020-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167496
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD020 SDG#: DX026-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-020-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167496
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DD020 SDG#: DX026-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 19:25	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167497
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL147 SDG#: DX026-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167497
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL147 SDG#: DX026-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.141	JQ	0.0318	1
11031	12378-PeCDD	40321-76-4	1.19	JB	0.0800	1
11031	123478-HxCDD	39227-28-6	2.06	JBQ	0.0596	1
11031	123678-HxCDD	57653-85-7	5.50	JB	0.0612	1
11031	123789-HxCDD	19408-74-3	3.99	JB	0.0611	1
11031	1234678-HpCDD	35822-46-9	153	B	0.131	1
11031	OCDD	3268-87-9	1,760	B	0.131	1
11031	2378-TCDF	51207-31-9	0.535	JB	0.0629	1
11031	12378-PeCDF	57117-41-6	2.05	JB	0.0294	1
11031	23478-PeCDF	57117-31-4	1.02	JB	0.0284	1
11031	123478-HxCDF	70648-26-9	1.30	JBQ	0.0441	1
11031	123678-HxCDF	57117-44-9	1.39	JB	0.0423	1
11031	123789-HxCDF	72918-21-9	0.445	JB	0.0497	1
11031	234678-HxCDF	60851-34-5	1.61	JB	0.0428	1
11031	1234678-HpCDF	67562-39-4	26.4	B	0.133	1
11031	1234789-HpCDF	55673-89-7	2.38	JB	0.148	1
11031	OCDF	39001-02-0	89.6	B	0.0686	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	91	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	90	28 - 136
13C12-123789-HxCDF	91	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	88	26 - 138
13C12-OCDF	76	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167497
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL147 SDG#: DX026-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167497
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL147 SDG#: DX026-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 20:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167498
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL169 SDG#: DX026-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	11.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167498
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL169 SDG#: DX026-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0922	JQ	0.0341	1
11031	12378-PeCDD	40321-76-4	1.26	JB	0.0738	1
11031	123478-HxCDD	39227-28-6	2.30	JB	0.0604	1
11031	123678-HxCDD	57653-85-7	6.65	B	0.0639	1
11031	123789-HxCDD	19408-74-3	4.72	JB	0.0608	1
11031	1234678-HpCDD	35822-46-9	178	B	0.172	1
11031	OCDD	3268-87-9	2,180	B	0.148	1
11031	2378-TCDF	51207-31-9	0.425	JB	0.0634	1
11031	12378-PeCDF	57117-41-6	1.09	JB	0.0310	1
11031	23478-PeCDF	57117-31-4	1.00	JB	0.0297	1
11031	123478-HxCDF	70648-26-9	1.27	JB	0.0475	1
11031	123678-HxCDF	57117-44-9	1.31	JB	0.0452	1
11031	123789-HxCDF	72918-21-9	0.642	JBQ	0.0514	1
11031	234678-HxCDF	60851-34-5	1.49	JB	0.0475	1
11031	1234678-HpCDF	67562-39-4	24.8	B	0.134	1
11031	1234789-HpCDF	55673-89-7	2.36	JB	0.169	1
11031	OCDF	39001-02-0	108	B	0.0830	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	89	28 - 136
13C12-123789-HxCDF	89	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	85	26 - 138
13C12-OCDF	78	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167498
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL169 SDG#: DX026-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					



Analysis Report

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Page 4 of 4

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167498
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL169 SDG#: DX026-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 21:18	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167499
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL172 SDG#: DX026-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167499
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL172 SDG#: DX026-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.142	JQ	0.0287	1
11031	12378-PeCDD	40321-76-4	0.883	JB	0.0667	1
11031	123478-HxCDD	39227-28-6	1.51	JB	0.0430	1
11031	123678-HxCDD	57653-85-7	3.39	JB	0.0449	1
11031	123789-HxCDD	19408-74-3	3.75	JB	0.0447	1
11031	1234678-HpCDD	35822-46-9	83.4	B	0.125	1
11031	OCDD	3268-87-9	1,390	B	0.101	1
11031	2378-TCDF	51207-31-9	0.225	JBQ	0.0484	1
11031	12378-PeCDF	57117-41-6	0.455	JB	0.0238	1
11031	23478-PeCDF	57117-31-4	0.466	JB	0.0229	1
11031	123478-HxCDF	70648-26-9	0.536	JB	0.0403	1
11031	123678-HxCDF	57117-44-9	0.670	JB	0.0375	1
11031	123789-HxCDF	72918-21-9	0.474	JB	0.0454	1
11031	234678-HxCDF	60851-34-5	0.775	JB	0.0373	1
11031	1234678-HpCDF	67562-39-4	11.0	B	0.0931	1
11031	1234789-HpCDF	55673-89-7	1.02	JB	0.119	1
11031	OCDF	39001-02-0	33.2	B	0.0642	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	90	25 - 181
13C12-123478-HxCDD	94	32 - 141
13C12-123678-HxCDD	93	28 - 130
13C12-123789-HxCDD	92	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	86	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	94	21 - 178
13C12-123478-HxCDF	103	26 - 152
13C12-123678-HxCDF	105	26 - 123
13C12-234678-HxCDF	104	28 - 136
13C12-123789-HxCDF	102	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	99	26 - 138
13C12-OCDF	90	17 - 157
13C12-1278-TCDD (CRS)	93	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167499
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL172 SDG#: DX026-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167499
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL172 SDG#: DX026-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 22:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167500
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL173 SDG#: DX026-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167500
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL173 SDG#: DX026-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0963 JQ	0.0265	1.07	1
11031	12378-PeCDD	40321-76-4	1.41 JB	0.0727	5.33	1
11031	123478-HxCDD	39227-28-6	3.41 JB	0.0719	5.33	1
11031	123678-HxCDD	57653-85-7	16.6 B	0.0735	5.33	1
11031	123789-HxCDD	19408-74-3	9.19 B	0.0733	5.33	1
11031	1234678-HpCDD	35822-46-9	563 B	0.373	5.33	1
11031	OCDD	3268-87-9	16,200 EB	0.248	10.7	1
11031	2378-TCDF	51207-31-9	0.216 JB	0.0439	1.07	1
11031	12378-PeCDF	57117-41-6	0.574 JB	0.0248	5.33	1
11031	23478-PeCDF	57117-31-4	0.721 JB	0.0245	5.33	1
11031	123478-HxCDF	70648-26-9	2.02 JB	0.0419	5.33	1
11031	123678-HxCDF	57117-44-9	0.747 JB	0.0397	5.33	1
11031	123789-HxCDF	72918-21-9	0.827 JB	0.0489	5.33	1
11031	234678-HxCDF	60851-34-5	1.22 JB	0.0396	5.33	1
11031	1234678-HpCDF	67562-39-4	30.5 B	0.0897	5.33	1
11031	1234789-HpCDF	55673-89-7	1.47 JB	0.129	5.33	1
11031	OCDF	39001-02-0	99.5 B	0.0630	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	90	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	96	26 - 152
13C12-123678-HxCDF	97	26 - 123
13C12-234678-HxCDF	96	28 - 136

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167500
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL173 SDG#: DX026-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-123789-HxCDF	93	29 - 147			
	13C12-1234678-HpCDF	100	28 - 143			
	13C12-1234789-HpCDF	85	26 - 138			
	13C12-OCDF	90	17 - 157			
	13C12-1278-TCDD (CRS)	86	35 - 197			

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

S Saturation of detection signal

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167500
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL173 SDG#: DX026-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 23:11	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167501
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL176 SDG#: DX026-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	4.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167501
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL176 SDG#: DX026-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0734	U	0.0734	1
11031	12378-PeCDD	40321-76-4	1.08	JBQ	0.249	1
11031	123478-HxCDD	39227-28-6	1.58	JBQ	0.155	1
11031	123678-HxCDD	57653-85-7	5.20	JB	0.158	1
11031	123789-HxCDD	19408-74-3	3.59	JB	0.158	1
11031	1234678-HpCDD	35822-46-9	130	B	0.216	1
11031	OCDD	3268-87-9	1,380	B	0.177	1
11031	2378-TCDF	51207-31-9	6.42	B	0.261	1
11650	2378-TCDF-Conf	51207-31-9	6.28	B	0.0780	1
11031	12378-PeCDF	57117-41-6	23.0	B	0.103	1
11031	23478-PeCDF	57117-31-4	4.69	JB	0.103	1
11031	123478-HxCDF	70648-26-9	4.68	JB	0.103	1
11031	123678-HxCDF	57117-44-9	3.10	JB	0.0989	1
11031	123789-HxCDF	72918-21-9	1.31	JBQ	0.115	1
11031	234678-HxCDF	60851-34-5	2.46	JB	0.105	1
11031	1234678-HpCDF	67562-39-4	15.8	B	0.109	1
11031	1234789-HpCDF	55673-89-7	1.98	JB	0.134	1
11031	OCDF	39001-02-0	35.8	B	0.0771	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-2378-TCDF-Conf	77	24 - 169
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	74	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167501
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL176 SDG#: DX026-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167501
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL176 SDG#: DX026-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 00:08	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11008001	02/04/2011 17:17	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167502
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL178 SDG#: DX026-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	22.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167502
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL178 SDG#: DX026-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.76 Q	0.282	1.28	1
11031	12378-PeCDD	40321-76-4	11.2 B	0.401	6.42	1
11031	123478-HxCDD	39227-28-6	19.7 B	0.245	6.42	1
11031	123678-HxCDD	57653-85-7	61.1 B	0.260	6.42	1
11031	123789-HxCDD	19408-74-3	43.2 B	0.244	6.42	1
11031	1234678-HpCDD	35822-46-9	1,450 B	0.591	6.42	1
11031	OCDD	3268-87-9	15,300 EB	0.571	12.8	1
11031	2378-TCDF	51207-31-9	2.68 B	0.378	1.28	1
11650	2378-TCDF-Conf	51207-31-9	2.68 B	0.127	1.28	1
11031	12378-PeCDF	57117-41-6	6.59 B	0.169	6.42	1
11031	23478-PeCDF	57117-31-4	5.60 JBQ	0.161	6.42	1
11031	123478-HxCDF	70648-26-9	10.3 B	0.202	6.42	1
11031	123678-HxCDF	57117-44-9	10.9 B	0.192	6.42	1
11031	123789-HxCDF	72918-21-9	2.81 JB	0.214	6.42	1
11031	234678-HxCDF	60851-34-5	11.5 B	0.197	6.42	1
11031	1234678-HpCDF	67562-39-4	213 B	0.221	6.42	1
11031	1234789-HpCDF	55673-89-7	15.8 B	0.246	6.42	1
11031	OCDF	39001-02-0	595 B	0.188	12.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-2378-TCDF-Conf	79	24 - 169
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	75	21 - 178

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167502
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL178 SDG#: DX026-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-123478-HxCDF	84	26 - 152			
	13C12-123678-HxCDF	83	26 - 123			
	13C12-234678-HxCDF	86	28 - 136			
	13C12-123789-HxCDF	87	29 - 147			
	13C12-1234678-HpCDF	83	28 - 143			
	13C12-1234789-HpCDF	89	26 - 138			
	13C12-0CDF	89	17 - 157			
	13C12-1278-TCDD (CRS)	80	35 - 197			

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167502
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL178 SDG#: DX026-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 04:07	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11008001	02/04/2011 18:23	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167503
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL186 SDG#: DX026-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167503
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL186 SDG#: DX026-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.123	JQ 0.0592	1.07	1
11031	12378-PeCDD	40321-76-4	0.507	JBQ 0.144	5.37	1
11031	123478-HxCDD	39227-28-6	2.16	JB 0.136	5.37	1
11031	123678-HxCDD	57653-85-7	3.51	JB 0.140	5.37	1
11031	123789-HxCDD	19408-74-3	2.68	JB 0.140	5.37	1
11031	1234678-HpCDD	35822-46-9	171	B 0.265	5.37	1
11031	OCDD	3268-87-9	1,480	B 0.217	10.7	1
11031	2378-TCDF	51207-31-9	0.191	JBQ 0.133	1.07	1
11031	12378-PeCDF	57117-41-6	0.878	JB 0.0600	5.37	1
11031	23478-PeCDF	57117-31-4	0.555	JB 0.0576	5.37	1
11031	123478-HxCDF	70648-26-9	0.511	JB 0.0850	5.37	1
11031	123678-HxCDF	57117-44-9	0.616	JB 0.0808	5.37	1
11031	123789-HxCDF	72918-21-9	0.419	JB 0.0992	5.37	1
11031	234678-HxCDF	60851-34-5	0.718	JBQ 0.0813	5.37	1
11031	1234678-HpCDF	67562-39-4	13.1	B 0.103	5.37	1
11031	1234789-HpCDF	55673-89-7	1.31	JB 0.131	5.37	1
11031	OCDF	39001-02-0	65.8	B 0.108	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167503
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL186 SDG#: DX026-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167503
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL186 SDG#: DX026-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 05:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167504
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL187 SDG#: DX026-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167504
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL187 SDG#: DX026-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.876 J	0.0702	1.06	1
11031	12378-PeCDD	40321-76-4	6.98 B	0.183	5.30	1
11031	123478-HxCDD	39227-28-6	15.6 B	0.161	5.30	1
11031	123678-HxCDD	57653-85-7	31.0 B	0.169	5.30	1
11031	123789-HxCDD	19408-74-3	27.1 B	0.161	5.30	1
11031	1234678-HpCDD	35822-46-9	1,340 B	0.600	5.30	1
11031	OCDD	3268-87-9	23,500 EB	0.434	10.6	1
11031	2378-TCDF	51207-31-9	0.228 JB	0.136	1.06	1
11031	12378-PeCDF	57117-41-6	1.60 JB	0.0660	5.30	1
11031	23478-PeCDF	57117-31-4	2.32 JB	0.0665	5.30	1
11031	123478-HxCDF	70648-26-9	9.78 B	0.172	5.30	1
11031	123678-HxCDF	57117-44-9	60.4 B	0.162	5.30	1
11031	123789-HxCDF	72918-21-9	1.65 JB	0.198	5.30	1
11031	234678-HxCDF	60851-34-5	18.8 B	0.172	5.30	1
11031	1234678-HpCDF	67562-39-4	334 B	0.166	5.30	1
11031	1234789-HpCDF	55673-89-7	30.3 B	0.217	5.30	1
11031	OCDF	39001-02-0	1,880 B	0.181	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	87	28 - 136

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167504
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL187 SDG#: DX026-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-123789-HxCDF	84	29 - 147			
	13C12-1234678-HpCDF	88	28 - 143			
	13C12-1234789-HpCDF	82	26 - 138			
	13C12-OCDF	83	17 - 157			
	13C12-1278-TCDD (CRS)	79	35 - 197			

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

S Saturation of detection signal

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167504
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL187 SDG#: DX026-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 06:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167505
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167505
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0470 JQ	0.0424	1.07	1
11031	12378-PeCDD	40321-76-4	0.414 JBQ	0.0788	5.37	1
11031	123478-HxCDD	39227-28-6	0.542 JBQ	0.0902	5.37	1
11031	123678-HxCDD	57653-85-7	1.68 JB	0.0914	5.37	1
11031	123789-HxCDD	19408-74-3	1.86 JB	0.0857	5.37	1
11031	1234678-HpCDD	35822-46-9	38.3 B	0.139	5.37	1
11031	OCDD	3268-87-9	508 B	0.115	10.7	1
11031	2378-TCDF	51207-31-9	0.102 JB	0.0725	1.07	1
11031	12378-PeCDF	57117-41-6	0.459 JB	0.0394	5.37	1
11031	23478-PeCDF	57117-31-4	0.379 JBQ	0.0378	5.37	1
11031	123478-HxCDF	70648-26-9	0.307 JBQ	0.0734	5.37	1
11031	123678-HxCDF	57117-44-9	0.372 JBQ	0.0670	5.37	1
11031	123789-HxCDF	72918-21-9	0.472 JBQ	0.0800	5.37	1
11031	234678-HxCDF	60851-34-5	0.351 JB	0.0725	5.37	1
11031	1234678-HpCDF	67562-39-4	5.44 B	0.0787	5.37	1
11031	1234789-HpCDF	55673-89-7	0.570 JB	0.111	5.37	1
11031	OCDF	39001-02-0	18.0 B	0.0758	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167505
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167505
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 06:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167506
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167506
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.3	0.0475	1.07	1
11031	12378-PeCDD	40321-76-4	112 B	0.0914	5.37	1
11031	123478-HxCDD	39227-28-6	119 B	0.0778	5.37	1
11031	123678-HxCDD	57653-85-7	119 B	0.0796	5.37	1
11031	123789-HxCDD	19408-74-3	123 B	0.0799	5.37	1
11031	1234678-HpCDD	35822-46-9	162 B	0.122	5.37	1
11031	OCDD	3268-87-9	867 B	0.150	10.7	1
11031	2378-TCDF	51207-31-9	24.1 B	0.0708	1.07	1
11031	12378-PeCDF	57117-41-6	118 B	0.0371	5.37	1
11031	23478-PeCDF	57117-31-4	118 B	0.0373	5.37	1
11031	123478-HxCDF	70648-26-9	118 B	0.0958	5.37	1
11031	123678-HxCDF	57117-44-9	117 B	0.0893	5.37	1
11031	123789-HxCDF	72918-21-9	120 B	0.116	5.37	1
11031	234678-HxCDF	60851-34-5	117 B	0.0937	5.37	1
11031	1234678-HpCDF	67562-39-4	124 B	0.0912	5.37	1
11031	1234789-HpCDF	55673-89-7	119 B	0.114	5.37	1
11031	OCDF	39001-02-0	266 B	0.0823	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	90	26 - 152
13C12-123678-HxCDF	94	26 - 123
13C12-234678-HxCDF	90	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	90	26 - 138
13C12-OCDF	87	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167506
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167506
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 07:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167507
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167507
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.1	0.0712	1.07	1
11031	12378-PeCDD	40321-76-4	111 B	0.0854	5.37	1
11031	123478-HxCDD	39227-28-6	118 B	0.118	5.37	1
11031	123678-HxCDD	57653-85-7	119 B	0.122	5.37	1
11031	123789-HxCDD	19408-74-3	116 B	0.117	5.37	1
11031	1234678-HpCDD	35822-46-9	162 B	0.158	5.37	1
11031	OCDD	3268-87-9	997 B	0.223	10.7	1
11031	2378-TCDF	51207-31-9	23.1 B	0.0994	1.07	1
11031	12378-PeCDF	57117-41-6	120 B	0.0519	5.37	1
11031	23478-PeCDF	57117-31-4	119 B	0.0513	5.37	1
11031	123478-HxCDF	70648-26-9	118 B	0.118	5.37	1
11031	123678-HxCDF	57117-44-9	117 B	0.111	5.37	1
11031	123789-HxCDF	72918-21-9	119 B	0.134	5.37	1
11031	234678-HxCDF	60851-34-5	118 B	0.118	5.37	1
11031	1234678-HpCDF	67562-39-4	124 B	0.175	5.37	1
11031	1234789-HpCDF	55673-89-7	121 B	0.223	5.37	1
11031	OCDF	39001-02-0	268 B	0.109	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	77	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167507
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167507
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL189 SDG#: DX026-14MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 08:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167508
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL192 SDG#: DX026-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	7.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167508
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL192 SDG#: DX026-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.126 JQ	0.0843	1.08	1
11031	12378-PeCDD	40321-76-4	0.537 JB	0.131	5.38	1
11031	123478-HxCDD	39227-28-6	1.04 JBQ	0.130	5.38	1
11031	123678-HxCDD	57653-85-7	4.22 JBQ	0.132	5.38	1
11031	123789-HxCDD	19408-74-3	2.18 JB	0.130	5.38	1
11031	1234678-HpCDD	35822-46-9	82.4 B	0.216	5.38	1
11031	OCDD	3268-87-9	812 B	0.198	10.8	1
11031	2378-TCDF	51207-31-9	0.431 U	0.431	1.08	1
11031	12378-PeCDF	57117-41-6	0.622 JB	0.128	5.38	1
11031	23478-PeCDF	57117-31-4	1.19 JBQ	0.119	5.38	1
11031	123478-HxCDF	70648-26-9	0.745 JBQ	0.132	5.38	1
11031	123678-HxCDF	57117-44-9	0.877 JB	0.121	5.38	1
11031	123789-HxCDF	72918-21-9	1.11 JB	0.140	5.38	1
11031	234678-HxCDF	60851-34-5	1.45 JB	0.128	5.38	1
11031	1234678-HpCDF	67562-39-4	12.3 B	0.137	5.38	1
11031	1234789-HpCDF	55673-89-7	5.18 JB	0.171	5.38	1
11031	OCDF	39001-02-0	37.2 B	0.101	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	85	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	97	26 - 152
13C12-123678-HxCDF	100	26 - 123
13C12-234678-HxCDF	98	28 - 136
13C12-123789-HxCDF	99	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	97	26 - 138
13C12-OCDF	95	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167508
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL192 SDG#: DX026-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167508
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL192 SDG#: DX026-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 09:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167509
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL194 SDG#: DX026-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167509
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL194 SDG#: DX026-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0483 U	0.0483	1.11	1
11031	12378-PeCDD	40321-76-4	0.250 JBQ	0.0808	5.54	1
11031	123478-HxCDD	39227-28-6	0.463 JB	0.0873	5.54	1
11031	123678-HxCDD	57653-85-7	1.42 JB	0.0909	5.54	1
11031	123789-HxCDD	19408-74-3	0.988 JBQ	0.0874	5.54	1
11031	1234678-HpCDD	35822-46-9	43.8 B	0.133	5.54	1
11031	OCDD	3268-87-9	478 B	0.118	11.1	1
11031	2378-TCDF	51207-31-9	0.218 JB	0.113	1.11	1
11031	12378-PeCDF	57117-41-6	0.570 JB	0.0728	5.54	1
11031	23478-PeCDF	57117-31-4	0.246 JB	0.0707	5.54	1
11031	123478-HxCDF	70648-26-9	0.410 JB	0.0763	5.54	1
11031	123678-HxCDF	57117-44-9	0.483 JB	0.0726	5.54	1
11031	123789-HxCDF	72918-21-9	0.359 JB	0.0824	5.54	1
11031	234678-HxCDF	60851-34-5	0.476 JB	0.0738	5.54	1
11031	1234678-HpCDF	67562-39-4	7.14 B	0.0722	5.54	1
11031	1234789-HpCDF	55673-89-7	0.619 JBQ	0.0875	5.54	1
11031	OCDF	39001-02-0	18.9 B	0.0602	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	94	26 - 152
13C12-123678-HxCDF	95	26 - 123
13C12-234678-HxCDF	95	28 - 136
13C12-123789-HxCDF	98	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	96	26 - 138
13C12-OCDF	94	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167509
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL194 SDG#: DX026-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167509
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL194 SDG#: DX026-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 10:43	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167510
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL196 SDG#: DX026-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167510
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL196 SDG#: DX026-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0467 U	0.0467	1.05	1
11031	12378-PeCDD	40321-76-4	0.351 JBQ	0.0996	5.27	1
11031	123478-HxCDD	39227-28-6	0.420 JB	0.0899	5.27	1
11031	123678-HxCDD	57653-85-7	1.30 JB	0.0911	5.27	1
11031	123789-HxCDD	19408-74-3	1.22 JB	0.0909	5.27	1
11031	1234678-HpCDD	35822-46-9	27.4 B	0.113	5.27	1
11031	OCDD	3268-87-9	356 B	0.125	10.5	1
11031	2378-TCDF	51207-31-9	0.165 JBQ	0.122	1.05	1
11031	12378-PeCDF	57117-41-6	0.807 JB	0.0708	5.27	1
11031	23478-PeCDF	57117-31-4	0.670 JB	0.0698	5.27	1
11031	123478-HxCDF	70648-26-9	0.493 JBQ	0.0888	5.27	1
11031	123678-HxCDF	57117-44-9	0.531 JB	0.0799	5.27	1
11031	123789-HxCDF	72918-21-9	0.431 JB	0.0972	5.27	1
11031	234678-HxCDF	60851-34-5	0.428 JB	0.0848	5.27	1
11031	1234678-HpCDF	67562-39-4	4.22 JB	0.0563	5.27	1
11031	1234789-HpCDF	55673-89-7	0.451 JB	0.0776	5.27	1
11031	OCDF	39001-02-0	10.6 B	0.0662	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	94	26 - 152
13C12-123678-HxCDF	98	26 - 123
13C12-234678-HxCDF	92	28 - 136
13C12-123789-HxCDF	94	29 - 147
13C12-1234678-HpCDF	100	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	85	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167510
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL196 SDG#: DX026-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167510
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL196 SDG#: DX026-17

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 11:39	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167511
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL198 SDG#: DX026-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167511
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL198 SDG#: DX026-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0909	J 0.0682	1.07	1
11031	12378-PeCDD	40321-76-4	0.529	JB 0.128	5.34	1
11031	123478-HxCDD	39227-28-6	1.12	JB 0.123	5.34	1
11031	123678-HxCDD	57653-85-7	2.67	JB 0.125	5.34	1
11031	123789-HxCDD	19408-74-3	2.29	JBQ 0.130	5.34	1
11031	1234678-HpCDD	35822-46-9	82.2	B 0.218	5.34	1
11031	OCDD	3268-87-9	1,130	B 0.204	10.7	1
11031	2378-TCDF	51207-31-9	0.247	JB 0.112	1.07	1
11031	12378-PeCDF	57117-41-6	0.544	JB 0.0598	5.34	1
11031	23478-PeCDF	57117-31-4	0.642	JB 0.0567	5.34	1
11031	123478-HxCDF	70648-26-9	0.560	JBQ 0.0973	5.34	1
11031	123678-HxCDF	57117-44-9	0.651	JB 0.0907	5.34	1
11031	123789-HxCDF	72918-21-9	0.405	JBQ 0.105	5.34	1
11031	234678-HxCDF	60851-34-5	0.727	JBQ 0.0923	5.34	1
11031	1234678-HpCDF	67562-39-4	11.4	B 0.0843	5.34	1
11031	1234789-HpCDF	55673-89-7	1.12	JBQ 0.110	5.34	1
11031	OCDF	39001-02-0	51.9	B 0.106	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	76	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167511
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL198 SDG#: DX026-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167511
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL198 SDG#: DX026-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 12:36	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167512
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL199 SDG#: DX026-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	6.0	0.50	0.50	1

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167512
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL199 SDG#: DX026-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0700 JQ	0.0502	1.06	1
11031	12378-PeCDD	40321-76-4	0.294 JBQ	0.106	5.32	1
11031	123478-HxCDD	39227-28-6	0.319 JB	0.0796	5.32	1
11031	123678-HxCDD	57653-85-7	1.26 JB	0.0840	5.32	1
11031	123789-HxCDD	19408-74-3	1.37 JB	0.0812	5.32	1
11031	1234678-HpCDD	35822-46-9	20.7 B	0.102	5.32	1
11031	OCDD	3268-87-9	262 B	0.0982	10.6	1
11031	2378-TCDF	51207-31-9	0.161 JBQ	0.119	1.06	1
11031	12378-PeCDF	57117-41-6	1.78 JB	0.0521	5.32	1
11031	23478-PeCDF	57117-31-4	1.44 JB	0.0535	5.32	1
11031	123478-HxCDF	70648-26-9	0.393 JBQ	0.0676	5.32	1
11031	123678-HxCDF	57117-44-9	0.652 JB	0.0590	5.32	1
11031	123789-HxCDF	72918-21-9	0.456 JB	0.0738	5.32	1
11031	234678-HxCDF	60851-34-5	0.941 JB	0.0631	5.32	1
11031	1234678-HpCDF	67562-39-4	3.84 JB	0.0466	5.32	1
11031	1234789-HpCDF	55673-89-7	0.423 JB	0.0631	5.32	1
11031	OCDF	39001-02-0	9.64 JB	0.0602	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	92	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	78	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration



Analysis Report

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Page 3 of 4

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167512
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL199 SDG#: DX026-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167512
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL199 SDG#: DX026-19

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 16:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167513
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL202 SDG#: DX026-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167513
LLI Group # 1225976
Account # 13013

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CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL202 SDG#: DX026-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0725 JQ	0.0701	1.07	1
11031	12378-PeCDD	40321-76-4	0.351 JBQ	0.100	5.36	1
11031	123478-HxCDD	39227-28-6	0.578 JBQ	0.113	5.36	1
11031	123678-HxCDD	57653-85-7	2.71 JBQ	0.119	5.36	1
11031	123789-HxCDD	19408-74-3	1.31 JB	0.119	5.36	1
11031	1234678-HpCDD	35822-46-9	51.5 B	0.145	5.36	1
11031	OCDD	3268-87-9	559 B	0.130	10.7	1
11031	2378-TCDF	51207-31-9	0.194 JBQ	0.155	1.07	1
11031	12378-PeCDF	57117-41-6	0.574 JB	0.0637	5.36	1
11031	23478-PeCDF	57117-31-4	0.443 JB	0.0606	5.36	1
11031	123478-HxCDF	70648-26-9	0.351 JBQ	0.0792	5.36	1
11031	123678-HxCDF	57117-44-9	0.366 JBQ	0.0750	5.36	1
11031	123789-HxCDF	72918-21-9	0.376 JBQ	0.0818	5.36	1
11031	234678-HxCDF	60851-34-5	0.687 JB	0.0755	5.36	1
11031	1234678-HpCDF	67562-39-4	5.92 B	0.0552	5.36	1
11031	1234789-HpCDF	55673-89-7	0.565 JB	0.0672	5.36	1
11031	OCDF	39001-02-0	18.6 B	0.0748	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	47	25 - 164
13C12-12378-PeCDD	53	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	63	28 - 130
13C12-123789-HxCDD	64	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	48	24 - 169
13C12-12378-PeCDF	54	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167513
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL202 SDG#: DX026-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167513
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/17/2010 09:40

Reported: 02/21/2011 16:53

DL202 SDG#: DX026-20*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 17:32	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/21/11 at 04:53 PM

Group Number: 1225976

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 10357162402A 28a Moisture Content by 160.3	Sample number(s): 6167492-6167503				100		80-120		
Batch number: 10357162402B 28a Moisture Content by 160.3	Sample number(s): 6167504-6167513				100		80-120		

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11008001	Sample number(s): 6167492-6167513								
2378-TCDD	0.00900 U	0.00900	1.00	ng/kg	100		67-158		
12378-PeCDD	0.0325 J	0.0117	5.00	ng/kg	102		70-142		
123478-HxCDD	0.0377 J	0.00980	5.00	ng/kg	102		70-164		
123678-HxCDD	0.0525 J	0.0100	5.00	ng/kg	99		76-134		
123789-HxCDD	0.0432 J	0.0102	5.00	ng/kg	100		64-162		
1234678-HpCDD	0.172 J	0.0136	5.00	ng/kg	99		70-140		
OCDD	0.339 J	0.0171	10.0	ng/kg	100		78-144		
2378-TCDF	0.0100 J	0.00910	1.00	ng/kg	104		75-158		
2378-TCDF-Conf	0.0580 J	0.0301	1.00	ng/kg					
12378-PeCDF	0.0530 J	0.00550	5.00	ng/kg	100		80-134		
23478-PeCDF	0.0835 J	0.00540	5.00	ng/kg	100		68-160		
123478-HxCDF	0.0876 J	0.0100	5.00	ng/kg	96		72-134		
123678-HxCDF	0.0702 J	0.00900	5.00	ng/kg	95		84-130		
123789-HxCDF	0.0636 J	0.0112	5.00	ng/kg	94		78-130		
234678-HxCDF	0.108 J	0.00960	5.00	ng/kg	94		70-156		
1234678-HpCDF	0.295 J	0.00560	5.00	ng/kg	96		82-122		
1234789-HpCDF	0.0694 J	0.00820	5.00	ng/kg	96		78-138		
OCDF	0.270 J	0.0174	10.0	ng/kg	97		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 10357162402A 28a Moisture Content by 160.3	Sample number(s): 6167492-6167503					BKG: P167471 25.8	24.4	6	20
Batch number: 10357162402B 28a Moisture Content by 160.3	Sample number(s): 6167504-6167513					BKG: P167481 6.9	6.8	2	20
Batch number: 11008001	Sample number(s): 6167492-6167513					UNSPK: 6167505			

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/21/11 at 04:53 PM

Group Number: 1225976

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDD	99	98	67-158	1	25				
12378-PeCDD	104	103	70-142	0	25				
123478-HxCDD	110	109	70-164	1	25				
123678-HxCDD	109	109	76-134	0	25				
123789-HxCDD	113	106	64-162	6	25				
1234678-HpCDD	115	115	70-140	0	25				
OCDD	167*	228*	78-144	14	25				
2378-TCDF	112	107	75-158	5	25				
12378-PeCDF	109	111	80-134	2	25				
23478-PeCDF	110	110	68-160	0	25				
123478-HxCDF	110	110	72-134	0	25				
123678-HxCDF	109	109	84-130	0	25				
123789-HxCDF	111	110	78-130	1	25				
234678-HxCDF	109	110	70-156	1	25				
1234678-HpCDF	110	110	82-122	0	25				
1234789-HpCDF	111	112	78-138	1	25				
OCDF	115	116	63-170	1	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11008001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6167492	76	77	80	83	79	79
6167493	75	77	77	80	76	78
6167494	67	72	74	77	72	73
6167495	69	74	80	82	83	82
6167496	73	80	90	92	89	87
6167497	73	80	91	89	90	91
6167498	75	80	89	89	89	89
6167499	82	94	103	105	104	102
6167500	81	87	96	97	96	93
6167501	70	70	83	82	79	81
6167502	72	75	84	83	86	87
6167503	61	68	79	79	79	76
6167504	70	77	89	89	87	84
6167505	67	69	79	81	79	78
6167506	75	78	90	94	90	87
6167507	60	66	80	81	79	77
6167508	82	84	97	100	98	99
6167509	81	83	94	95	95	98
6167510	77	79	94	98	92	94
6167511	66	74	81	82	80	81
6167512	77	76	85	92	87	85
6167513	47	55	68	69	71	73
Blank	73	77	81	87	81	81

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/21/11 at 04:53 PM

Group Number: 1225976

Surrogate Quality Control

MS	75	78	90	94	90	87
MSD	60	66	80	81	79	77
OPR	52	54	58	61	58	56
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6167492	75	64	48	81	75	82
6167493	75	63	50	83	76	79
6167494	72	67	55	78	71	77
6167495	79	80	79	79	70	74
6167496	89	80	83	80	76	80
6167497	87	88	76	82	76	80
6167498	87	85	78	82	77	81
6167499	104	99	90	93	90	94
6167500	100	85	90	86	85	87
6167501	80	78	75	74	68	72
6167502	83	89	89	80	70	77
6167503	77	74	73	76	64	71
6167504	88	82	83	79	73	80
6167505	85	75	72	71	65	73
6167506	94	90	87	82	73	80
6167507	83	78	77	69	62	72
6167508	99	97	95	87	80	88
6167509	96	96	94	83	79	84
6167510	100	91	85	83	76	85
6167511	80	76	76	78	69	75
6167512	92	83	78	79	73	81
6167513	73	73	74	85	53	64
Blank	84	70	55	89	76	84
MS	94	90	87	82	73	80
MSD	83	78	77	69	62	72
OPR	56	49	37	59	53	58
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6167492	80	79	71	55	80	81
6167493	77	79	70	57	79	81
6167494	75	74	71	60	73	75
6167495	73	73	73	77	73	75
6167496	80	80	79	79	76	83
6167497	80	80	78	70	77	81
6167498	77	79	78	73	76	80
6167499	93	92	92	86	86	95
6167500	87	87	87	95	83	90
6167501	71	71	74	73	70	73
6167502	72	74	78	85	75	74
6167503	70	69	70	71	67	68
6167504	78	78	78	84	77	79
6167505	71	73	74	72	67	70
6167506	80	79	84	81	79	84
6167507	69	71	74	72	64	66
6167508	87	89	92	92	85	86

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/21/11 at 04:53 PM

Group Number: 1225976

Surrogate Quality Control

6167509	85	86	89	90	83	83
6167510	84	85	86	85	82	84
6167511	73	74	73	73	72	73
6167512	78	80	80	80	76	83
6167513	63	64	67	72	48	54
Blank	83	83	77	63	76	81
MS	80	79	84	81	79	84
MSD	69	71	74	72	64	66
OPR	59	60	51	40	53	57

Limits:	28-130	28-130	23-140	17-157	24-169	24-185

13C12-2378-TCDF-Conf

6167492	
6167493	
6167494	
6167495	79
6167496	
6167497	
6167498	
6167499	
6167500	
6167501	77
6167502	79
6167503	
6167504	
6167505	
6167506	
6167507	
6167508	
6167509	
6167510	
6167511	
6167512	
6167513	
Blank	86
MS	
MSD	
OPR	

Limits: 24-169

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

January 27, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/18/2010

Group Number: 1226239

SDG: DE045

PO Number: 1203-004-007-AL

Release Number: Tracking #11667

State of Sample Origin: CA

Client Sample DescriptionDUP08-SA5B-QC-121710 Soil
EB05-SA5B-121710 Water
EB01-SIV-121710 Water
SED-014-SIV-SD-0.0-0.5 Sediment
SED-012-SIV-SD-0.0-0.5 Sediment
SED-006-SIV-SD-0.0-0.5 Sediment
SED-001-SIV-SD-0.0-0.5 Sediment
SED-004-SIV-SD-0.0-0.5 Sediment
SL-282-SA5B-SB-4.0-5.0 Soil
SL-282-SA5B-SB-7.0-8.0 Soil
SL-281-SA5B-SB-4.0-5.0 Soil
SL-281-SA5B-SB-8.0-9.0 Soil
SL-026-SA5B-SB-4.0-5.0 Soil
SL-026-SA5B-SB-9.0-10 Soil
TB-121710 WaterLancaster Labs (LLI) #6169016
6169017
6169018
6169019
6169020
6169021
6169022
6169023
6169024
6169025
6169026
6169027
6169028
6169029
6169030

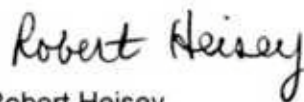
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC
COPY TO
1 COPY TOCDM Federal Services Program
Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey
Senior Specialist

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4501 SDG#: DE045-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190		1
04688	4-Chloroaniline	106-47-8	75	U 75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	750	U 750	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	37	U 37	190		1
04688	4-Methylphenol	106-44-5	37	U 37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	37	U 37	190		1
04688	4-Nitroaniline	100-01-6	75	U 75	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenol	108-95-2	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4501 SDG#: DE045-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U 0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.82	J 0.37	1.9		1
10138	Anthracene	120-12-7	2.7	0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	5.8	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	7.4	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	27	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	18	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U 0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	7.6	J 6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7	U 6.7	20		1
10138	Chrysene	218-01-9	11	0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	1.3	J 0.75	1.9		1
10138	Diethylphthalate	84-66-2	6.7	U 6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U 6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	14	J 6.7	20		1
10138	Fluoranthene	206-44-0	13	0.75	1.9		1
10138	Fluorene	86-73-7	0.75	U 0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	9.3	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.94	J 0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	2.2	0.75	1.9		1
10138	Naphthalene	91-20-3	2.1	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U 0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7	U 6.7	20		1
10138	Phenanthrene	85-01-8	6.2	0.75	1.9		1
10138	Pyrene	129-00-0	14	0.75	1.9		1

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	4.0
10401	Dalapon	75-99-0	4.9	U 4.9	10
10401	2,4-DB	94-82-6	0.70	U 0.70	1.9
10401	Dicamba	1918-00-9	0.45	U 0.45	1.3
10401	Dinoseb	88-85-7	0.90	U 0.90	2.7
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U 0.90	1.9
10401	MCPA	94-74-6	85	U 85	280
10401	MCPP (Mecoprop)	93-65-2	84	U 84	280
10401	2,4,5-T	93-76-5	0.092	U 0.092	0.19
10401	2,4,5-TP	93-72-1	0.084	U 0.084	0.19

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4501 SDG#: DE045-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.37 U	0.37	0.93		5
01363	Alpha BHC	319-84-6	0.19 U	0.19	0.93		5
01363	Beta BHC	319-85-7	0.34 U	0.34	0.93		5
01363	Gamma BHC - Lindane	58-89-9	0.19 U	0.19	0.93		5
01363	Chlordane	57-74-9	4.5 U	4.5	19		5
01363	p,p-DDD	72-54-8	3.3 U	3.3	3.3		5
01363	p,p-DDE	72-55-9	0.37 U	0.37	1.9		5
01363	p,p-DDT	50-29-3	4.5 U	4.5	4.5		5
01363	Delta BHC	319-86-8	0.20 U	0.20	0.93		5
01363	Dieldrin	60-57-1	2.1 U	0.37	1.9		5
01363	Endosulfan I	959-98-8	0.25 U	0.25	0.93		5
01363	Endosulfan II	33213-65-9	1.6 U	1.6	1.9		5
01363	Endosulfan Sulfate	1031-07-8	0.37 U	0.37	1.9		5
01363	Endrin	72-20-8	0.37 U	0.37	1.9		5
01363	Endrin Aldehyde	7421-93-4	0.61 U	0.61	1.9		5
01363	Endrin Ketone	53494-70-5	0.37 U	0.37	1.9		5
01363	Heptachlor	76-44-8	0.34 U	0.34	0.93		5
01363	Heptachlor Epoxide	1024-57-3	0.19 U	0.19	0.93		5
01363	Methoxychlor	72-43-5	1.9 U	1.9	9.3		5
01363	Mirex	2385-85-5	0.37 U	0.37	1.9		5
01363	Toxaphene	8001-35-2	12 U	12	37		5

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	11	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9	1
10225	PCB-1254	11097-69-1	34	0.37	1.9	1
10225	PCB-1260	11096-82-5	13	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9	1

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg
01643	Aluminum	7429-90-5	23,100	5.37	21.4	1
07914	Boron	7440-42-8	7.84	0.950	5.34	1
01650	Calcium	7440-70-2	6,300	6.54	21.4	1
01654	Iron	7439-89-6	27,300	5.03	21.4	1
01656	Lithium	7439-93-2	38.4	0.23	2.1	1
01657	Magnesium	7439-95-4	5,940	2.71	10.7	1
06958	Manganese	7439-96-5	344	0.0833	0.534	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4501 SDG#: DE045-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
10145	Phosphorus	7723-14-0	536	0.598	10.7		1
01662	Potassium	7440-09-7	4,320	19.2	53.4		1
01667	Sodium	7440-23-5	120	39.8	107		1
07968	Strontium	7440-24-6	39.9	0.0662	0.534		1
06969	Tin	7440-31-5	3.08 J	1.07	10.7		1
06970	Titanium	7440-32-6	1,320	0.406	1.07		1
10146	Zirconium	7440-67-7	4.80 J	0.897	5.34		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.113 J	0.0659	0.220		2
		Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	11.8	0.0659	0.440		2
06126	Barium	7440-39-3	156	0.119	0.440		2
06127	Beryllium	7440-41-7	0.958	0.0176	0.110		2
06128	Cadmium	7440-43-9	1.70	0.0396	0.110		2
06131	Chromium	7440-47-3	47.2	0.132	0.440		2
06132	Cobalt	7440-48-4	8.63	0.0220	0.110		2
06133	Copper	7440-50-8	39.6	0.0725	0.440		2
06135	Lead	7439-92-1	21.6	0.0114	0.220		2
06138	Molybdenum	7439-98-7	1.31	0.0550	0.110		2
06139	Nickel	7440-02-0	23.4	0.110	0.440		2
06141	Selenium	7782-49-2	0.266 J	0.0440	0.440		2
06142	Silver	7440-22-4	34.3	0.0132	0.110		2
06145	Thallium	7440-28-0	0.403	0.0330	0.110		2
06148	Vanadium	7440-62-2	59.1	0.0242	0.110		2
06149	Zinc	7440-66-6	151	0.615	3.30		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0498 J	0.0031	0.107		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9	0.90	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.6		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.59 J	0.22	1.1		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	480	10.0	10.0		1
		The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

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Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4501 SDG#: DE045-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	Wet Chemistry	SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.03	0.0100	0.0100		1
	Wet Chemistry	EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	10.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 12:03	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 00:41	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011 04:23	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011 02:21	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 02:18	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010 00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

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Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4501 SDG#: DE045-01FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:19	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:29	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 18:09	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 17:29	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 12:30	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4502 SDG#: DE045-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1 U	1	5		1
04678	Benzidine	92-87-5	20 U	20	60		1
04678	Benzoic acid	65-85-0	6 U	6	15		1
04678	Benzyl alcohol	100-51-6	5 U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1 U	1	5		1
04678	Carbazole	86-74-8	1 U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1 U	1	5		1
04678	4-Chloroaniline	106-47-8	1 U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1 U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1 U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1 U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2 U	2	5		1
04678	2-Chlorophenol	95-57-8	1 U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2 U	2	5		1
04678	Dibenzofuran	132-64-9	1 U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2 U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1 U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3 U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3 U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5 U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10 U	10	30		1
04678	2,4-Dinitrotoluene	121-14-2	1 U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1 U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1 U	1	5		1
04678	Hexachlorobenzene	118-74-1	1 U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1 U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5 U	5	15		1
04678	Hexachloroethane	67-72-1	1 U	1	5		1
04678	Isophorone	78-59-1	1 U	1	5		1
04678	2-Methylphenol	95-48-7	1 U	1	5		1
04678	4-Methylphenol	106-44-5	2 U	2	5		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1 U	1	5		1
04678	3-Nitroaniline	99-09-2	1 U	1	5		1
04678	4-Nitroaniline	100-01-6	1 U	1	5		1
04678	Nitrobenzene	98-95-3	1 U	1	5		1
04678	2-Nitrophenol	88-75-5	1 U	1	5		1
04678	4-Nitrophenol	100-02-7	10 U	10	30		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3 U	3	15		1
04678	Phenol	108-95-2	1 U	1	5		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4502 SDG#: DE045-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C							
04678	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1 U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1 U	1	5		1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:							
1,3-dichlorobenzene							
1,4-dichlorobenzene							
GC/MS Semivolatiles SW-846 8270C SIM							
10137	Acenaphthene	83-32-9	0.010 U	0.010	0.051		1
10137	Acenaphthylene	208-96-8	0.010 U	0.010	0.051		1
10137	Anthracene	120-12-7	0.010 U	0.010	0.051		1
10137	Benzo(a)anthracene	56-55-3	0.010 U	0.010	0.051		1
10137	Benzo(a)pyrene	50-32-8	0.010 U	0.010	0.051		1
10137	Benzo(b)fluoranthene	205-99-2	0.010 U	0.010	0.051		1
10137	Benzo(g,h,i)perylene	191-24-2	0.010 U	0.010	0.051		1
10137	Benzo(k)fluoranthene	207-08-9	0.010 U	0.010	0.051		1
10137	Butylbenzylphthalate	85-68-7	0.051 U	0.051	1.0		1
10137	Di-n-butylphthalate	84-74-2	0.50 J	0.051	1.0		1
10137	Chrysene	218-01-9	0.010 U	0.010	0.051		1
10137	Dibenz(a,h)anthracene	53-70-3	0.010 U	0.010	0.051		1
10137	Diethylphthalate	84-66-2	0.11 J	0.051	1.0		1
10137	Dimethylphthalate	131-11-3	0.051 U	0.051	1.0		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.33 J	0.051	1.0		1
10137	Fluoranthene	206-44-0	0.010 U	0.010	0.051		1
10137	Fluorene	86-73-7	0.010 U	0.010	0.051		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010 U	0.010	0.051		1
10137	1-Methylnaphthalene	90-12-0	0.010 U	0.010	0.051		1
10137	2-Methylnaphthalene	91-57-6	0.010 U	0.010	0.051		1
10137	Naphthalene	91-20-3	0.029 J	0.010	0.051		1
10137	N-Nitrosodimethylamine	62-75-9	0.010 U	0.010	0.051		1
10137	Di-n-octylphthalate	117-84-0	0.051 U	0.051	1.0		1
10137	Phenanthrene	85-01-8	0.010 U	0.010	0.051		1
10137	Pyrene	129-00-0	0.010 U	0.010	0.051		1
The recoveries of several compounds were outside of QC limits in the LCS/LCSD. The following compounds were detected in the method blank at the respective concentrations of:							
di-n-butylphthalate .16 ug/l							
bis(2-ethylhexyl)phthalate .19 ug/l							
These blank values were not subtracted from the analytical results.							
Sufficient sample was unavailable to repeat the analysis.							
Herbicides SW-846 8151A							
10407	2,4-D	94-75-7	0.17 U	0.17	0.52		1
10407	Dalapon	75-99-0	0.26 U	0.26	1.3		1
10407	2,4-DB	94-82-6	0.31 U	0.31	1.0		1
10407	Dicamba	1918-00-9	0.084 U	0.084	0.31		1
10407	Dinoseb	88-85-7	0.10 U	0.10	0.52		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4502 SDG#: DE045-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/l	ug/l	ug/l	ug/l	
10407	2,4-DP (Dichlorprop)	120-36-5	0.17 U	0.17	0.52		1
10407	MCPA	94-74-6	310 U	310	1,000		1
10407	MCPP	93-65-2	52 U	52	210		1
10407	2,4,5-T	93-76-5	0.016 U	0.016	0.052		1
10407	2,4,5-TP	93-72-1	0.010 U	0.010	0.052		1
Pesticides/PCBs		SW-846 8081A	ug/l	ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0021 U	0.0021	0.010		1
00177	Alpha BHC	319-84-6	0.0031 U	0.0031	0.010		1
00177	Beta BHC	319-85-7	0.0030 U	0.0030	0.010		1
00177	Gamma BHC - Lindane	58-89-9	0.0021 U	0.0021	0.010		1
00177	Chlordane	57-74-9	0.12 U	0.12	0.52		1
00177	p,p-DDD	72-54-8	0.0052 U	0.0052	0.021		1
00177	p,p-DDE	72-55-9	0.0052 U	0.0052	0.021		1
00177	p,p-DDT	50-29-3	0.0052 U	0.0052	0.021		1
00177	Delta BHC	319-86-8	0.0030 U	0.0030	0.010		1
00177	Dieldrin	60-57-1	0.0055 U	0.0055	0.021		1
00177	Endosulfan I	959-98-8	0.0045 U	0.0045	0.010		1
00177	Endosulfan II	33213-65-9	0.016 U	0.016	0.021		1
00177	Endosulfan Sulfate	1031-07-8	0.0060 U	0.0060	0.021		1
00177	Endrin	72-20-8	0.0084 U	0.0084	0.021		1
00177	Endrin Aldehyde	7421-93-4	0.021 U	0.021	0.10		1
00177	Endrin Ketone	53494-70-5	0.0052 U	0.0052	0.021		1
00177	Heptachlor	76-44-8	0.0027 U	0.0027	0.010		1
00177	Heptachlor Epoxide	1024-57-3	0.0024 U	0.0024	0.010		1
00177	Methoxychlor	72-43-5	0.031 U	0.031	0.10		1
00177	Mirex	2385-85-5	0.088 U	0.088	0.26		1
00177	Toxaphene	8001-35-2	1.0 U	1.0	3.1		1
Pesticides/PCBs		SW-846 8082	ug/l	ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10 U	0.10	0.52		1
10227	Aroclor 5442	12642-23-8	0.10 U	0.10	0.52		1
10227	Aroclor 5460	11126-42-4	0.10 U	0.10	0.52		1
10227	PCB-1016	12674-11-2	0.10 U	0.10	0.52		1
10227	PCB-1221	11104-28-2	0.10 U	0.10	0.52		1
10227	PCB-1232	11141-16-5	0.21 U	0.21	0.52		1
10227	PCB-1242	53469-21-9	0.10 U	0.10	0.52		1
10227	PCB-1248	12672-29-6	0.10 U	0.10	0.52		1
10227	PCB-1254	11097-69-1	0.10 U	0.10	0.52		1
10227	PCB-1260	11096-82-5	0.10 U	0.10	0.52		1
10227	PCB-1262	37324-23-5	0.21 U	0.21	0.52		1
10227	PCB-1268	11100-14-4	0.17 U	0.17	0.52		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4502 SDG#: DE045-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals			mg/l	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
SW-846 6010B			mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
SW-846 6020			mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
SW-846 7470A			mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry			mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
EPA 314.0			ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
SW-846 7199			ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 01/27/2011 12:46

Chantilly VA 20151

E4502 SDG#: DE045-02EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10354WAM026	01/17/2011 09:23	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354WAI026	01/05/2011 15:21	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	10354WAM026	12/21/2010 08:30	Olivia Arosemena	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	10354WAI026	12/21/2010 01:00	Sherry L Morrow	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103560021A	12/23/2010 17:34	John W Perkins	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103550011A	12/23/2010 17:42	Lisa A Reinert	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103550011A	01/05/2011 19:39	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103550012A	12/31/2010 11:34	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103550012A	12/21/2010 18:10	JoElla L Rice	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103550011A	12/21/2010 18:10	JoElla L Rice	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103560021A	12/22/2010 20:30	Elaine F Stoltzfus	1
01743	Aluminum	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
08014	Boron	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
01754	Iron	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
01756	Lithium	SW-846 6010B	1	103551848003	12/23/2010 17:17	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
01762	Potassium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
01767	Sodium	SW-846 6010B	1	103551848003	12/23/2010 17:17	John P Hook	1
08068	Strontium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
07069	Tin	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
07070	Titanium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
10144	Zirconium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
06024	Antimony	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103556050002D	12/23/2010 20:33	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103556050002C	12/23/2010 20:33	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103556050002B	12/23/2010 20:33	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 01/27/2011 12:46

Chantilly VA 20151

E4502 SDG#: DE045-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103545713001	12/21/2010 06:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103551848003	12/22/2010 09:26	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103556050002	12/22/2010 08:48	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103545713001	12/20/2010 13:45	Damary Valentin	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10355196901A	12/18/2010 16:46	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10363658701A	12/29/2010 12:29	Ashley M Adams	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10352196301A	12/18/2010 14:00	Ashley M Adams	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4503 SDG#: DE045-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1 U	1	5		1
04678	Benzidine	92-87-5	20 U	20	59		1
04678	Benzoic acid	65-85-0	6 U	6	15		1
04678	Benzyl alcohol	100-51-6	5 U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1 U	1	5		1
04678	Carbazole	86-74-8	1 U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1 U	1	5		1
04678	4-Chloroaniline	106-47-8	1 U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1 U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1 U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1 U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2 U	2	5		1
04678	2-Chlorophenol	95-57-8	1 U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2 U	2	5		1
04678	Dibenzofuran	132-64-9	1 U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2 U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1 U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3 U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3 U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5 U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10 U	10	30		1
04678	2,4-Dinitrotoluene	121-14-2	1 U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1 U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1 U	1	5		1
04678	Hexachlorobenzene	118-74-1	1 U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1 U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5 U	5	15		1
04678	Hexachloroethane	67-72-1	1 U	1	5		1
04678	Isophorone	78-59-1	1 U	1	5		1
04678	2-Methylphenol	95-48-7	1 U	1	5		1
04678	4-Methylphenol	106-44-5	2 U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04678	2-Nitroaniline	88-74-4	1 U	1	5		1
04678	3-Nitroaniline	99-09-2	1 U	1	5		1
04678	4-Nitroaniline	100-01-6	1 U	1	5		1
04678	Nitrobenzene	98-95-3	1 U	1	5		1
04678	2-Nitrophenol	88-75-5	1 U	1	5		1
04678	4-Nitrophenol	100-02-7	10 U	10	30		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3 U	3	15		1
04678	Phenol	108-95-2	1 U	1	5		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4503 SDG#: DE045-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1 U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1 U	1	5		1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 1,3-dichlorobenzene 1,4-dichlorobenzene							
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010 U	0.010	0.052		1
10137	Acenaphthylene	208-96-8	0.010 U	0.010	0.052		1
10137	Anthracene	120-12-7	0.010 U	0.010	0.052		1
10137	Benzo(a)anthracene	56-55-3	0.010 U	0.010	0.052		1
10137	Benzo(a)pyrene	50-32-8	0.010 U	0.010	0.052		1
10137	Benzo(b)fluoranthene	205-99-2	0.010 U	0.010	0.052		1
10137	Benzo(g,h,i)perylene	191-24-2	0.010 U	0.010	0.052		1
10137	Benzo(k)fluoranthene	207-08-9	0.010 U	0.010	0.052		1
10137	Butylbenzylphthalate	85-68-7	0.052 U	0.052	1.0		1
10137	Di-n-butylphthalate	84-74-2	0.23 J	0.052	1.0		1
10137	Chrysene	218-01-9	0.010 U	0.010	0.052		1
10137	Dibenz(a,h)anthracene	53-70-3	0.010 U	0.010	0.052		1
10137	Diethylphthalate	84-66-2	0.054 J	0.052	1.0		1
10137	Dimethylphthalate	131-11-3	0.052 U	0.052	1.0		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.29 J	0.052	1.0		1
10137	Fluoranthene	206-44-0	0.010 U	0.010	0.052		1
10137	Fluorene	86-73-7	0.010 U	0.010	0.052		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010 U	0.010	0.052		1
10137	1-Methylnaphthalene	90-12-0	0.010 U	0.010	0.052		1
10137	2-Methylnaphthalene	91-57-6	0.010 U	0.010	0.052		1
10137	Naphthalene	91-20-3	0.051 J	0.010	0.052		1
10137	N-Nitrosodimethylamine	62-75-9	0.010 U	0.010	0.052		1
10137	Di-n-octylphthalate	117-84-0	0.052 U	0.052	1.0		1
10137	Phenanthrene	85-01-8	0.010 U	0.010	0.052		1
10137	Pyrene	129-00-0	0.010 U	0.010	0.052		1
The recoveries of several compounds were outside of QC limits in the LCS/LCSD. The following compounds were detected in the method blank at the respective concentrations of: di-n-butylphthalate .16 ug/l bis(2-ethylhexyl)phthalate .19 ug/l These blank values were not subtracted from the analytical results. Sufficient sample was unavailable to repeat the analysis.							
Herbicides	SW-846 8151A	ug/l	ug/l	ug/l	ug/l	ug/l	
10407	2,4-D	94-75-7	0.17 U	0.17	0.52		1
10407	Dalapon	75-99-0	0.26 U	0.26	1.3		1
10407	2,4-DB	94-82-6	0.31 U	0.31	1.0		1
10407	Dicamba	1918-00-9	0.083 U	0.083	0.31		1
10407	Dinoseb	88-85-7	0.10 U	0.10	0.52		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4503 SDG#: DE045-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/l	ug/l	ug/l	ug/l	
10407	2,4-DP (Dichlorprop)	120-36-5	0.17 U	0.17	0.52		1
10407	MCPA	94-74-6	310 U	310	1,000		1
10407	MCPP	93-65-2	52 U	52	210		1
10407	2,4,5-T	93-76-5	0.016 U	0.016	0.052		1
10407	2,4,5-TP	93-72-1	0.010 U	0.010	0.052		1
Pesticides/PCBs		SW-846 8081A	ug/l	ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0021 U	0.0021	0.010		1
00177	Alpha BHC	319-84-6	0.0031 U	0.0031	0.010		1
00177	Beta BHC	319-85-7	0.0030 U	0.0030	0.010		1
00177	Gamma BHC - Lindane	58-89-9	0.0021 U	0.0021	0.010		1
00177	Chlordane	57-74-9	0.12 U	0.12	0.51		1
00177	p,p-DDD	72-54-8	0.0051 U	0.0051	0.021		1
00177	p,p-DDE	72-55-9	0.0051 U	0.0051	0.021		1
00177	p,p-DDT	50-29-3	0.0051 U	0.0051	0.021		1
00177	Delta BHC	319-86-8	0.0030 U	0.0030	0.010		1
00177	Dieldrin	60-57-1	0.0054 U	0.0054	0.021		1
00177	Endosulfan I	959-98-8	0.0044 U	0.0044	0.010		1
00177	Endosulfan II	33213-65-9	0.015 U	0.015	0.021		1
00177	Endosulfan Sulfate	1031-07-8	0.0059 U	0.0059	0.021		1
00177	Endrin	72-20-8	0.0083 U	0.0083	0.021		1
00177	Endrin Aldehyde	7421-93-4	0.021 U	0.021	0.10		1
00177	Endrin Ketone	53494-70-5	0.0051 U	0.0051	0.021		1
00177	Heptachlor	76-44-8	0.0027 U	0.0027	0.010		1
00177	Heptachlor Epoxide	1024-57-3	0.0024 U	0.0024	0.010		1
00177	Methoxychlor	72-43-5	0.031 U	0.031	0.10		1
00177	Mirex	2385-85-5	0.087 U	0.087	0.26		1
00177	Toxaphene	8001-35-2	1.0 U	1.0	3.1		1
Pesticides/PCBs		SW-846 8082	ug/l	ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10 U	0.10	0.51		1
10227	Aroclor 5442	12642-23-8	0.10 U	0.10	0.51		1
10227	Aroclor 5460	11126-42-4	0.10 U	0.10	0.51		1
10227	PCB-1016	12674-11-2	0.10 U	0.10	0.51		1
10227	PCB-1221	11104-28-2	0.10 U	0.10	0.51		1
10227	PCB-1232	11141-16-5	0.21 U	0.21	0.51		1
10227	PCB-1242	53469-21-9	0.10 U	0.10	0.51		1
10227	PCB-1248	12672-29-6	0.10 U	0.10	0.51		1
10227	PCB-1254	11097-69-1	0.10 U	0.10	0.51		1
10227	PCB-1260	11096-82-5	0.10 U	0.10	0.51		1
10227	PCB-1262	37324-23-5	0.21 U	0.21	0.51		1
10227	PCB-1268	11100-14-4	0.16 U	0.16	0.51		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4503 SDG#: DE045-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
		SW-846 6020	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
		SW-846 7470A	mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
		EPA 314.0	ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
		SW-846 7199	ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 01/27/2011 12:46

Chantilly VA 20151

E4503 SDG#: DE045-03EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10354WAM026	01/17/2011 09:48	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354WAI026	01/05/2011 15:53	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	10354WAM026	12/21/2010 08:30	Olivia Arosemena	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	10354WAI026	12/21/2010 01:00	Sherry L Morrow	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103560021A	12/23/2010 18:01	John W Perkins	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103550011A	12/23/2010 17:53	Lisa A Reinert	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103550011A	01/05/2011 19:51	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103550012A	12/31/2010 11:52	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103550012A	12/21/2010 18:10	JoElla L Rice	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103550011A	12/21/2010 18:10	JoElla L Rice	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103560021A	12/22/2010 20:30	Elaine F Stoltzfus	1
01743	Aluminum	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
08014	Boron	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
01754	Iron	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
01756	Lithium	SW-846 6010B	1	103551848003	12/23/2010 17:21	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
01762	Potassium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
01767	Sodium	SW-846 6010B	1	103551848003	12/23/2010 17:21	John P Hook	1
08068	Strontium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
07069	Tin	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
07070	Titanium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
10144	Zirconium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
06024	Antimony	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103556050002D	12/23/2010 20:36	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103556050002C	12/23/2010 20:36	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103556050002B	12/23/2010 20:36	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 01/27/2011 12:46

Chantilly VA 20151

E4503 SDG#: DE045-03EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103545713001	12/21/2010 06:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103551848003	12/22/2010 09:26	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103556050002	12/22/2010 08:48	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103545713001	12/20/2010 13:45	Damary Valentin	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10355196901A	12/21/2010 09:10	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10363658701A	12/29/2010 12:53	Ashley M Adams	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10352196301A	12/18/2010 14:13	Ashley M Adams	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4504 SDG#: DE045-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	590		1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900		1
04688	Benzoic acid	65-85-0	200	U 200	590		1
04688	Benzyl alcohol	100-51-6	200	U 200	590		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200		1
04688	Carbazole	86-74-8	20	U 20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	200		1
04688	4-Chloroaniline	106-47-8	78	U 78	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200		1
04688	2-Chlorophenol	95-57-8	20	U 20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	200		1
04688	Dibenzofuran	132-64-9	20	U 20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	200		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	590		1
04688	2,4-Dinitrophenol	51-28-5	780	U 780	2,400		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200		1
04688	Hexachlorobenzene	118-74-1	20	U 20	200		1
04688	Hexachlorobutadiene	87-68-3	78	U 78	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	590		1
04688	Hexachloroethane	67-72-1	20	U 20	200		1
04688	Isophorone	78-59-1	20	U 20	200		1
04688	2-Methylphenol	95-48-7	39	U 39	200		1
04688	4-Methylphenol	106-44-5	39	U 39	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U 20	200		1
04688	3-Nitroaniline	99-09-2	39	U 39	200		1
04688	4-Nitroaniline	100-01-6	78	U 78	200		1
04688	Nitrobenzene	98-95-3	20	U 20	200		1
04688	2-Nitrophenol	88-75-5	20	U 20	200		1
04688	4-Nitrophenol	100-02-7	200	U 200	590		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U 200	590		1
04688	Phenol	108-95-2	20	U 20	200		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4504 SDG#: DE045-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	20	U 20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	200		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	200		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.78	U 0.78	2.0		1
10138	Acenaphthylene	208-96-8	0.39	U 0.39	2.0		1
10138	Anthracene	120-12-7	0.39	U 0.39	2.0		1
10138	Benzo(a)anthracene	56-55-3	1.2	J 0.78	2.0		1
10138	Benzo(a)pyrene	50-32-8	1.2	J 0.78	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	3.0	0.78	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	1.0	J 0.78	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	1.1	J 0.78	2.0		1
10138	Butylbenzylphthalate	85-68-7	11	J 7.1	21		1
10138	Di-n-butylphthalate	84-74-2	7.1	U 7.1	21		1
10138	Chrysene	218-01-9	1.9	J 0.39	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.78	U 0.78	2.0		1
10138	Diethylphthalate	84-66-2	7.1	U 7.1	21		1
10138	Dimethylphthalate	131-11-3	7.1	U 7.1	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	18	J 7.1	21		1
10138	Fluoranthene	206-44-0	2.7	0.78	2.0		1
10138	Fluorene	86-73-7	1.9	J 0.78	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.91	J 0.78	2.0		1
10138	1-Methylnaphthalene	90-12-0	0.78	U 0.78	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.78	U 0.78	2.0		1
10138	Naphthalene	91-20-3	0.98	J 0.78	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.78	U 0.78	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.1	U 7.1	21		1
10138	Phenanthrene	85-01-8	1.4	J 0.78	2.0		1
10138	Pyrene	129-00-0	2.2	0.78	2.0		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U 1.4	4.2		1
10401	Dalapon	75-99-0	5.2	U 5.2	11		1
10401	2,4-DB	94-82-6	7.5	U 7.5	7.5		1
10401	Dicamba	1918-00-9	0.47	U 0.47	1.4		1
10401	Dinoseb	88-85-7	0.94	U 0.94	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.94	U 0.94	2.0		1
10401	MCPA	94-74-6	580	U 580	580		1
10401	MCPP (Mecoprop)	93-65-2	88	U 88	290		1
10401	2,4,5-T	93-76-5	0.096	U 0.096	0.20		1
10401	2,4,5-TP	93-72-1	0.088	U 0.088	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4504 SDG#: DE045-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	attained.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.078 U	0.078	0.20		1
01363	Alpha BHC	319-84-6	0.040 U	0.040	0.20		1
01363	Beta BHC	319-85-7	0.071 U	0.071	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.040 U	0.040	0.20		1
01363	Chlordane	57-74-9	0.94 U	0.94	4.0		1
01363	p,p-DDD	72-54-8	0.48 U	0.48	0.48		1
01363	p,p-DDE	72-55-9	0.73 U	0.73	0.73		1
01363	p,p-DDT	50-29-3	0.92 U	0.92	0.92		1
01363	Delta BHC	319-86-8	0.11 J	0.042	0.20		1
01363	Dieldrin	60-57-1	0.078 U	0.078	0.40		1
01363	Endosulfan I	959-98-8	0.052 U	0.052	0.20		1
01363	Endosulfan II	33213-65-9	0.18 U	0.18	0.40		1
01363	Endosulfan Sulfate	1031-07-8	0.078 U	0.078	0.40		1
01363	Endrin	72-20-8	0.078 U	0.078	0.40		1
01363	Endrin Aldehyde	7421-93-4	0.17 U	0.17	0.40		1
01363	Endrin Ketone	53494-70-5	0.078 U	0.078	0.40		1
01363	Heptachlor	76-44-8	0.071 U	0.071	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.11 U	0.11	0.20		1
01363	Methoxychlor	72-43-5	0.40 U	0.40	2.0		1
01363	Mirex	2385-85-5	0.24 U	0.24	0.40		1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.8		1
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.9		1
10225	Aroclor 5460	11126-42-4	4.8	1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39 U	0.39	2.0		1
10225	PCB-1221	11104-28-2	0.59 U	0.59	2.0		1
10225	PCB-1232	11141-16-5	0.61 U	0.61	2.0		1
10225	PCB-1242	53469-21-9	0.59 U	0.59	2.0		1
10225	PCB-1248	12672-29-6	0.39 U	0.39	2.0		1
10225	PCB-1254	11097-69-1	4.4	0.39	2.0		1
10225	PCB-1260	11096-82-5	1.9 J	0.39	2.0		1
10225	PCB-1262	37324-23-5	0.39 U	0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39 U	0.39	2.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,900	5.86	23.3		1
07914	Boron	7440-42-8	8.15	1.04	5.82		1
01650	Calcium	7440-70-2	6,160	7.14	23.3		1
01654	Iron	7439-89-6	18,700	5.49	23.3		1
01656	Lithium	7439-93-2	21.1	0.26	2.3		1
01657	Magnesium	7439-95-4	5,030	2.96	11.6		1
06958	Manganese	7439-96-5	274	0.0909	0.582		1
10145	Phosphorus	7723-14-0	441	0.652	11.6		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4504 SDG#: DE045-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01662	Potassium	7440-09-7	3,040	21.0	58.2		1
01667	Sodium	7440-23-5	101 J	43.4	116		1
07968	Strontium	7440-24-6	26.6	0.0722	0.582		1
06969	Tin	7440-31-5	2.99 J	1.16	11.6		1
06970	Titanium	7440-32-6	1,070	0.443	1.16		1
10146	Zirconium	7440-67-7	2.40 J	0.978	5.82		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.101 J	0.0692	0.231		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.93	0.0692	0.461		2
06126	Barium	7440-39-3	117	0.125	0.461		2
06127	Beryllium	7440-41-7	0.591	0.0185	0.115		2
06128	Cadmium	7440-43-9	0.279	0.0415	0.115		2
06131	Chromium	7440-47-3	22.9	0.138	0.461		2
06132	Cobalt	7440-48-4	8.83	0.0231	0.115		2
06133	Copper	7440-50-8	10.8	0.0761	0.461		2
06135	Lead	7439-92-1	12.2	0.0120	0.231		2
06138	Molybdenum	7439-98-7	1.09	0.0577	0.115		2
06139	Nickel	7440-02-0	14.4	0.115	0.461		2
06141	Selenium	7782-49-2	0.239 J	0.0461	0.461		2
06142	Silver	7440-22-4	0.0350 J	0.0138	0.115		2
06145	Thallium	7440-28-0	0.307	0.0346	0.115		2
06148	Vanadium	7440-62-2	47.2	0.0254	0.115		2
06149	Zinc	7440-66-6	84.4	0.646	3.46		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0209 J	0.0032	0.111		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1 J	0.94	1.2		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.6 U	10.6	35.3		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32 J	0.24	1.2		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	515	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4504 SDG#: DE045-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.56	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	15.0	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 12:38	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 01:13	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011 05:46	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011 02:35	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 02:37	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010 00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4504 SDG#: DE045-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:22	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:22	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:22	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:30	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 17:27	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 15:27	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 12:46	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4505 SDG#: DE045-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	530		1
04688	Benzidine	92-87-5	1,200	U 1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U 180	530		1
04688	Benzyl alcohol	100-51-6	180	U 180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U 35	180		1
04688	4-Chloroaniline	106-47-8	71	U 71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U 35	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U 35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U 35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	530		1
04688	2,4-Dinitrophenol	51-28-5	710	U 710	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U 35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U 71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	530		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	35	U 35	180		1
04688	4-Methylphenol	106-44-5	35	U 35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	35	U 35	180		1
04688	4-Nitroaniline	100-01-6	71	U 71	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	530		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4505 SDG#: DE045-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U 35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U 35	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U 0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U 0.35	1.8		1
10138	Anthracene	120-12-7	0.35	U 0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.95	J 0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.0	J 0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	2.2	0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.82	J 0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.89	J 0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	12	J 6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4	U 6.4	19		1
10138	Chrysene	218-01-9	1.5	J 0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U 0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U 6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U 6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J 6.4	19		1
10138	Fluoranthene	206-44-0	2.0	0.71	1.8		1
10138	Fluorene	86-73-7	11	0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U 0.71	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.71	U 0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71	U 0.71	1.8		1
10138	Naphthalene	91-20-3	0.71	U 0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U 0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U 6.4	19		1
10138	Phenanthrene	85-01-8	1.3	J 0.71	1.8		1
10138	Pyrene	129-00-0	1.8	0.71	1.8		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U 1.3	3.8		1
10401	Dalapon	75-99-0	4.7	U 4.7	9.6		1
10401	2,4-DB	94-82-6	6.9	U 6.9	6.9		1
10401	Dicamba	1918-00-9	0.77	J 0.42	1.3		1
10401	Dinoseb	88-85-7	0.85	U 0.85	2.5		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U 0.85	1.8		1
10401	MCPA	94-74-6	81	U 81	270		1
10401	MCPP (Mecoprop)	93-65-2	240	J 80	270		1
10401	2,4,5-T	93-76-5	0.087	U 0.087	0.18		1
10401	2,4,5-TP	93-72-1	0.080	U 0.080	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4505 SDG#: DE045-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	attained.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070 U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.036 U	0.036	0.18		1
01363	Beta BHC	319-85-7	0.064 U	0.064	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.036 U	0.036	0.18		1
01363	Chlordane	57-74-9	0.85 U	0.85	3.6		1
01363	p,p-DDD	72-54-8	0.35 J	0.070	0.36		1
01363	p,p-DDE	72-55-9	1.0	0.070	0.36		1
01363	p,p-DDT	50-29-3	1.4	0.070	0.36		1
01363	Delta BHC	319-86-8	0.038 U	0.038	0.18		1
01363	Dieldrin	60-57-1	0.12 J	0.070	0.36		1
01363	Endosulfan I	959-98-8	0.047 U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.11 U	0.11	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.070 U	0.070	0.36		1
01363	Endrin	72-20-8	0.070 U	0.070	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.40	0.070	0.36		1
01363	Endrin Ketone	53494-70-5	0.070 U	0.070	0.36		1
01363	Heptachlor	76-44-8	0.064 U	0.064	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.036 U	0.036	0.18		1
01363	Methoxychlor	72-43-5	0.36 U	0.36	1.8		1
01363	Mirex	2385-85-5	0.070 U	0.070	0.36		1
01363	Toxaphene	8001-35-2	2.3 U	2.3	7.0		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35 U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.53 U	0.53	1.8		1
10225	PCB-1232	11141-16-5	0.55 U	0.55	1.8		1
10225	PCB-1242	53469-21-9	0.53 U	0.53	1.8		1
10225	PCB-1248	12672-29-6	0.35 U	0.35	1.8		1
10225	PCB-1254	11097-69-1	0.47 U	0.47	1.8		1
10225	PCB-1260	11096-82-5	1.1 U	1.1	1.8		1
10225	PCB-1262	37324-23-5	0.35 U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35 U	0.35	1.8		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	7,920	5.34	21.2		1
07914	Boron	7440-42-8	6.39	0.945	5.31		1
01650	Calcium	7440-70-2	3,220	6.51	21.2		1
01654	Iron	7439-89-6	14,400	5.00	21.2		1
01656	Lithium	7439-93-2	17.6	0.23	2.1		1
01657	Magnesium	7439-95-4	3,640	2.70	10.6		1
06958	Manganese	7439-96-5	209	0.0828	0.531		1
10145	Phosphorus	7723-14-0	327	0.594	10.6		1
01662	Potassium	7440-09-7	2,450	19.1	53.1		1
01667	Sodium	7440-23-5	78.1 J	39.6	106		1
07968	Strontium	7440-24-6	10.3	0.0658	0.531		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4505 SDG#: DE045-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
06969	Tin	7440-31-5	2.05 J	1.06	10.6		1
06970	Titanium	7440-32-6	786	0.403	1.06		1
10146	Zirconium	7440-67-7	1.57 J	0.892	5.31		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.100 J	0.0607	0.202		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.73	0.0607	0.404		2
06126	Barium	7440-39-3	65.3	0.109	0.404		2
06127	Beryllium	7440-41-7	0.405	0.0162	0.101		2
06128	Cadmium	7440-43-9	0.157	0.0364	0.101		2
06131	Chromium	7440-47-3	15.3	0.121	0.404		2
06132	Cobalt	7440-48-4	4.48	0.0202	0.101		2
06133	Copper	7440-50-8	7.46	0.0667	0.404		2
06135	Lead	7439-92-1	9.90	0.0105	0.202		2
06138	Molybdenum	7439-98-7	0.478	0.0506	0.101		2
06139	Nickel	7440-02-0	9.76	0.101	0.404		2
06141	Selenium	7782-49-2	0.172 J	0.0404	0.404		2
06142	Silver	7440-22-4	0.0246 J	0.0121	0.101		2
06145	Thallium	7440-28-0	0.216	0.0303	0.101		2
06148	Vanadium	7440-62-2	32.1	0.0222	0.101		2
06149	Zinc	7440-66-6	64.1	0.566	3.03		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0078 J	0.0029	0.101		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7	0.85	1.1		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6 U	9.6	31.8		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.56 J	0.21	1.1		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	477	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.64	0.0100	0.0100		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4505 SDG#: DE045-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry			EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 13:13	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 01:45	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011 07:08	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011 02:49	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 02:55	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010 00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:59	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4505 SDG#: DE045-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:31	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 18:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 17:52	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 13:18	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4506 SDG#: DE045-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U 210	620		1
04688	Benzidine	92-87-5	1,500	U 1,500	4,200		1
04688	Benzoic acid	65-85-0	210	U 210	620		1
04688	Benzyl alcohol	100-51-6	210	U 210	620		1
04688	4-Bromophenyl-phenylether	101-55-3	21	U 21	210		1
04688	Carbazole	86-74-8	21	U 21	210		1
04688	4-Chloro-3-methylphenol	59-50-7	42	U 42	210		1
04688	4-Chloroaniline	106-47-8	83	U 83	210		1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U 21	210		1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U 21	210		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U 21	210		1
04688	2-Chloronaphthalene	91-58-7	21	U 21	210		1
04688	2-Chlorophenol	95-57-8	21	U 21	210		1
04688	4-Chlorophenyl-phenylether	7005-72-3	42	U 42	210		1
04688	Dibenzofuran	132-64-9	21	U 21	210		1
04688	1,2-Dichlorobenzene	95-50-1	21	U 21	210		1
04688	1,3-Dichlorobenzene	541-73-1	21	U 21	210		1
04688	1,4-Dichlorobenzene	106-46-7	21	U 21	210		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	420		1
04688	2,4-Dichlorophenol	120-83-2	21	U 21	210		1
04688	2,4-Dimethylphenol	105-67-9	42	U 42	210		1
04688	3,5-Dimethylphenol	108-68-9	42	U 42	210		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U 210	620		1
04688	2,4-Dinitrophenol	51-28-5	830	U 830	2,500		1
04688	2,4-Dinitrotoluene	121-14-2	42	U 42	210		1
04688	2,6-Dinitrotoluene	606-20-2	21	U 21	210		1
04688	1,2-Diphenylhydrazine	122-66-7	21	U 21	210		1
04688	Hexachlorobenzene	118-74-1	21	U 21	210		1
04688	Hexachlorobutadiene	87-68-3	83	U 83	210		1
04688	Hexachlorocyclopentadiene	77-47-4	210	U 210	620		1
04688	Hexachloroethane	67-72-1	21	U 21	210		1
04688	Isophorone	78-59-1	21	U 21	210		1
04688	2-Methylphenol	95-48-7	42	U 42	210		1
04688	4-Methylphenol	106-44-5	42	U 42	210		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U 21	210		1
04688	3-Nitroaniline	99-09-2	42	U 42	210		1
04688	4-Nitroaniline	100-01-6	83	U 83	210		1
04688	Nitrobenzene	98-95-3	21	U 21	210		1
04688	2-Nitrophenol	88-75-5	21	U 21	210		1
04688	4-Nitrophenol	100-02-7	210	U 210	620		1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U 21	210		1
04688	N-Nitrosodiphenylamine	86-30-6	21	U 21	210		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	210	U 210	620		1
04688	Phenol	108-95-2	21	U 21	210		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4506 SDG#: DE045-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	21	U 21	210		1
04688	2,4,5-Trichlorophenol	95-95-4	42	U 42	210		1
04688	2,4,6-Trichlorophenol	88-06-2	42	U 42	210		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.83	U 0.83	2.1		1
10138	Acenaphthylene	208-96-8	0.55	J 0.42	2.1		1
10138	Anthracene	120-12-7	0.83	J 0.42	2.1		1
10138	Benzo(a)anthracene	56-55-3	1.5	J 0.83	2.1		1
10138	Benzo(a)pyrene	50-32-8	1.7	J 0.83	2.1		1
10138	Benzo(b)fluoranthene	205-99-2	5.4	0.83	2.1		1
10138	Benzo(g,h,i)perylene	191-24-2	1.2	J 0.83	2.1		1
10138	Benzo(k)fluoranthene	207-08-9	1.7	J 0.83	2.1		1
10138	Butylbenzylphthalate	85-68-7	13	J 7.5	22		1
10138	Di-n-butylphthalate	84-74-2	7.5	U 7.5	22		1
10138	Chrysene	218-01-9	6.9	0.42	2.1		1
10138	Dibenz(a,h)anthracene	53-70-3	0.83	U 0.83	2.1		1
10138	Diethylphthalate	84-66-2	7.5	U 7.5	22		1
10138	Dimethylphthalate	131-11-3	7.5	U 7.5	22		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	54	7.5	22		1
10138	Fluoranthene	206-44-0	16	0.83	2.1		1
10138	Fluorene	86-73-7	0.83	U 0.83	2.1		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.0	J 0.83	2.1		1
10138	1-Methylnaphthalene	90-12-0	0.83	U 0.83	2.1		1
10138	2-Methylnaphthalene	91-57-6	0.83	U 0.83	2.1		1
10138	Naphthalene	91-20-3	0.83	U 0.83	2.1		1
10138	N-Nitrosodimethylamine	62-75-9	0.83	U 0.83	2.1		1
10138	Di-n-octylphthalate	117-84-0	7.5	U 7.5	22		1
10138	Phenanthrene	85-01-8	14	0.83	2.1		1
10138	Pyrene	129-00-0	11	0.83	2.1		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.5	U 1.5	4.5		1
10401	Dalapon	75-99-0	5.5	U 5.5	11		1
10401	2,4-DB	94-82-6	0.77	U 0.77	2.1		1
10401	Dicamba	1918-00-9	0.78	J 0.50	1.5		1
10401	Dinoseb	88-85-7	1.0	U 1.0	3.0		1
10401	2,4-DP (Dichlorprop)	120-36-5	2.0	J 1.0	2.1		1
10401	MCPA	94-74-6	390	95	310		1
10401	MCPP (Mecoprop)	93-65-2	360	94	310		1
10401	2,4,5-T	93-76-5	0.10	U 0.10	0.21		1
10401	2,4,5-TP	93-72-1	0.094	U 0.094	0.21		1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.							
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.082	U 0.082	0.21		1
01363	Alpha BHC	319-84-6	0.080	U 0.080	0.21		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4506 SDG#: DE045-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Beta BHC	319-85-7	0.075 U	0.075	0.21		1
01363	Gamma BHC - Lindane	58-89-9	0.042 U	0.042	0.21		1
01363	Chlordane	57-74-9	4.1 U	4.1	4.2		1
01363	p,p-DDD	72-54-8	1.3 U	1.3	1.3		1
01363	p,p-DDE	72-55-9	1.0 U	1.0	1.0		1
01363	p,p-DDT	50-29-3	1.2 U	1.2	1.2		1
01363	Delta BHC	319-86-8	0.14 J	0.045	0.21		1
01363	Dieldrin	60-57-1	0.50 U	0.50	0.50		1
01363	Endosulfan I	959-98-8	0.43 U	0.43	0.43		1
01363	Endosulfan II	33213-65-9	0.31 U	0.31	0.42		1
01363	Endosulfan Sulfate	1031-07-8	0.11 U	0.11	0.42		1
01363	Endrin	72-20-8	0.082 U	0.082	0.42		1
01363	Endrin Aldehyde	7421-93-4	0.082 U	0.082	0.42		1
01363	Endrin Ketone	53494-70-5	0.36 U	0.36	0.42		1
01363	Heptachlor	76-44-8	0.075 U	0.075	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.072 U	0.072	0.21		1
01363	Methoxychlor	72-43-5	0.42 U	0.42	2.1		1
01363	Mirex	2385-85-5	0.082 U	0.082	0.42		1
01363	Toxaphene	8001-35-2	2.7 U	2.7	8.2		1
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	4.1		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	4.1		1
10225	Aroclor 5460	11126-42-4	7.6	1.2	4.1		1
10225	PCB-1016	12674-11-2	0.41 U	0.41	2.1		1
10225	PCB-1221	11104-28-2	0.62 U	0.62	2.1		1
10225	PCB-1232	11141-16-5	0.65 U	0.65	2.1		1
10225	PCB-1242	53469-21-9	0.62 U	0.62	2.1		1
10225	PCB-1248	12672-29-6	0.41 U	0.41	2.1		1
10225	PCB-1254	11097-69-1	4.8	0.41	2.1		1
10225	PCB-1260	11096-82-5	4.9	0.41	2.1		1
10225	PCB-1262	37324-23-5	0.41 U	0.41	2.1		1
10225	PCB-1268	11100-14-4	0.41 U	0.41	2.1		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	30,200	6.04	24.0		1
07914	Boron	7440-42-8	11.3	1.07	6.00		1
01650	Calcium	7440-70-2	4,880	7.36	24.0		1
01654	Iron	7439-89-6	30,300	5.65	24.0		1
01656	Lithium	7439-93-2	26.5	0.26	2.4		1
01657	Magnesium	7439-95-4	6,430	3.05	12.0		1
06958	Manganese	7439-96-5	454	0.0936	0.600		1
10145	Phosphorus	7723-14-0	526	0.672	12.0		1
01662	Potassium	7440-09-7	5,400	21.6	60.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4506 SDG#: DE045-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01667	Sodium	7440-23-5	113 J	44.8	120		1
07968	Strontium	7440-24-6	32.8	0.0744	0.600		1
06969	Tin	7440-31-5	2.79 J	1.20	12.0		1
06970	Titanium	7440-32-6	1,460	0.456	1.20		1
10146	Zirconium	7440-67-7	6.11	1.01	6.00		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.174 J	0.0734	0.245		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.45	0.0734	0.490		2
06126	Barium	7440-39-3	184	0.132	0.490		2
06127	Beryllium	7440-41-7	0.991	0.0196	0.122		2
06128	Cadmium	7440-43-9	0.752	0.0441	0.122		2
06131	Chromium	7440-47-3	38.0	0.147	0.490		2
06132	Cobalt	7440-48-4	10.3	0.0245	0.122		2
06133	Copper	7440-50-8	17.7	0.0808	0.490		2
06135	Lead	7439-92-1	31.1	0.0127	0.245		2
06138	Molybdenum	7439-98-7	0.893	0.0612	0.122		2
06139	Nickel	7440-02-0	21.8	0.122	0.490		2
06141	Selenium	7782-49-2	0.193 J	0.0490	0.490		2
06142	Silver	7440-22-4	0.0845 J	0.0147	0.122		2
06145	Thallium	7440-28-0	0.449	0.0367	0.122		2
06148	Vanadium	7440-62-2	68.9	0.0269	0.122		2
06149	Zinc	7440-66-6	186	0.685	3.67		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0233 J	0.0034	0.120		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.0 U	1.0	1.2		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.2 U	11.2	37.5		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.35 J	0.25	1.2		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	599	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.29	0.0100	0.0100		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4506 SDG#: DE045-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	19.9	0.50	0.50	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 13:49	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 02:17	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011 07:36	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011 03:03	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 03:14	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010 00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:02	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4506 SDG#: DE045-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:32	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 18:38	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 18:15	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 13:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4507 SDG#: DE045-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U 760	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4507 SDG#: DE045-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76 U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9		1
10138	Anthracene	120-12-7	0.63 J	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.3 J	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.96 J	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	3.4	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.77 J	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	1.3 J	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	7.1 J	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	6.8 U	6.8	20		1
10138	Chrysene	218-01-9	5.8	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.8 U	6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8 U	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	41	6.8	20		1
10138	Fluoranthene	206-44-0	4.1	0.76	1.9		1
10138	Fluorene	86-73-7	3.0	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76 U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	1.8 J	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	2.1	0.76	1.9		1
10138	Naphthalene	91-20-3	3.8	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8 U	6.8	20		1
10138	Phenanthrene	85-01-8	6.8	0.76	1.9		1
10138	Pyrene	129-00-0	2.8	0.76	1.9		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.1		1
10401	Dalapon	75-99-0	5.0 U	5.0	10		1
10401	2,4-DB	94-82-6	1.7 U	1.7	1.9		1
10401	Dicamba	1918-00-9	1.9	0.46	1.4		1
10401	Dinoseb	88-85-7	0.91 U	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91 U	0.91	1.9		1
10401	MCPA	94-74-6	490 U	490	490		1
10401	MCPP (Mecoprop)	93-65-2	85 U	85	280		1
10401	2,4,5-T	93-76-5	0.093 U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085 U	0.085	0.19		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4507 SDG#: DE045-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	attained.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.075 U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.068 U	0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	0.91 U	0.91	3.9		1
01363	p,p-DDD	72-54-8	0.38 U	0.38	1.9		5
01363	p,p-DDE	72-55-9	2.6 U	2.6	2.6		1
01363	p,p-DDT	50-29-3	7.8	0.38	1.9		5
01363	Delta BHC	319-86-8	0.074 J	0.041	0.19		1
01363	Dieldrin	60-57-1	0.47 U	0.47	0.47		1
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	2.1 U	2.1	2.1		1
01363	Endosulfan Sulfate	1031-07-8	0.075 U	0.075	0.39		1
01363	Endrin	72-20-8	0.075 U	0.075	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.89 U	0.89	0.89		1
01363	Endrin Ketone	53494-70-5	0.075 U	0.075	0.39		1
01363	Heptachlor	76-44-8	0.068 U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.45 U	0.45	0.45		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.075 U	0.075	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.5		1
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.3 U	2.3	7.5		2
10225	Aroclor 5442	12642-23-8	2.3 U	2.3	7.5		2
10225	Aroclor 5460	11126-42-4	8.2	2.3	7.5		2
10225	PCB-1016	12674-11-2	0.75 U	0.75	3.9		2
10225	PCB-1221	11104-28-2	1.1 U	1.1	3.9		2
10225	PCB-1232	11141-16-5	1.2 U	1.2	3.9		2
10225	PCB-1242	53469-21-9	1.1 U	1.1	3.9		2
10225	PCB-1248	12672-29-6	0.75 U	0.75	3.9		2
10225	PCB-1254	11097-69-1	43	0.75	3.9		2
10225	PCB-1260	11096-82-5	18	0.75	3.9		2
10225	PCB-1262	37324-23-5	0.75 U	0.75	3.9		2
10225	PCB-1268	11100-14-4	0.75 U	0.75	3.9		2
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,400	5.61	22.3		1
07914	Boron	7440-42-8	8.79	0.993	5.58		1
01650	Calcium	7440-70-2	5,250	6.84	22.3		1
01654	Iron	7439-89-6	20,400	5.25	22.3		1
01656	Lithium	7439-93-2	23.8	0.25	2.2		1
01657	Magnesium	7439-95-4	4,420	2.83	11.2		1
06958	Manganese	7439-96-5	440	0.0870	0.558		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4507 SDG#: DE045-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
10145	Phosphorus	7723-14-0	423	0.625	11.2		1
01662	Potassium	7440-09-7	4,070	20.1	55.8		1
01667	Sodium	7440-23-5	110 J	41.6	112		1
07968	Strontium	7440-24-6	27.2	0.0692	0.558		1
06969	Tin	7440-31-5	2.27 J	1.12	11.2		1
06970	Titanium	7440-32-6	1,160	0.424	1.12		1
10146	Zirconium	7440-67-7	4.21 J	0.937	5.58		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.118 J	0.0663	0.221		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.32	0.0663	0.442		2
06126	Barium	7440-39-3	138	0.119	0.442		2
06127	Beryllium	7440-41-7	0.730	0.0177	0.110		2
06128	Cadmium	7440-43-9	0.457	0.0398	0.110		2
06131	Chromium	7440-47-3	26.7	0.133	0.442		2
06132	Cobalt	7440-48-4	7.38	0.0221	0.110		2
06133	Copper	7440-50-8	13.2	0.0729	0.442		2
06135	Lead	7439-92-1	15.3	0.0115	0.221		2
06138	Molybdenum	7439-98-7	1.05	0.0552	0.110		2
06139	Nickel	7440-02-0	16.0	0.110	0.442		2
06141	Selenium	7782-49-2	0.230 J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0983 J	0.0133	0.110		2
06145	Thallium	7440-28-0	0.335	0.0331	0.110		2
06148	Vanadium	7440-62-2	48.4	0.0243	0.110		2
06149	Zinc	7440-66-6	88.8	0.619	3.31		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.927	0.0080	0.280		2.5
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2	0.91	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	34.1		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.1		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	509	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4507 SDG#: DE045-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	Wet Chemistry	SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.16	0.0100	0.0100		1
	Wet Chemistry	EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	12.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 14:24	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 02:49	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011 08:03	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011 03:17	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/14/2011 21:30	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 03:33	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010 00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4507 SDG#: DE045-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:38	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:38	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:38	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 18:17	Nelli S Markaryan	2.5
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 18:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 18:38	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 13:42	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4508 SDG#: DE045-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U 210	620		1
04688	Benzidine	92-87-5	1,400	U 1,400	4,100		1
04688	Benzoic acid	65-85-0	210	U 210	620		1
04688	Benzyl alcohol	100-51-6	210	U 210	620		1
04688	4-Bromophenyl-phenylether	101-55-3	21	U 21	210		1
04688	Carbazole	86-74-8	21	U 21	210		1
04688	4-Chloro-3-methylphenol	59-50-7	41	U 41	210		1
04688	4-Chloroaniline	106-47-8	83	U 83	210		1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U 21	210		1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U 21	210		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U 21	210		1
04688	2-Chloronaphthalene	91-58-7	21	U 21	210		1
04688	2-Chlorophenol	95-57-8	21	U 21	210		1
04688	4-Chlorophenyl-phenylether	7005-72-3	41	U 41	210		1
04688	Dibenzofuran	132-64-9	21	U 21	210		1
04688	1,2-Dichlorobenzene	95-50-1	21	U 21	210		1
04688	1,3-Dichlorobenzene	541-73-1	21	U 21	210		1
04688	1,4-Dichlorobenzene	106-46-7	21	U 21	210		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	410		1
04688	2,4-Dichlorophenol	120-83-2	21	U 21	210		1
04688	2,4-Dimethylphenol	105-67-9	41	U 41	210		1
04688	3,5-Dimethylphenol	108-68-9	41	U 41	210		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U 210	620		1
04688	2,4-Dinitrophenol	51-28-5	830	U 830	2,500		1
04688	2,4-Dinitrotoluene	121-14-2	41	U 41	210		1
04688	2,6-Dinitrotoluene	606-20-2	21	U 21	210		1
04688	1,2-Diphenylhydrazine	122-66-7	21	U 21	210		1
04688	Hexachlorobenzene	118-74-1	21	U 21	210		1
04688	Hexachlorobutadiene	87-68-3	83	U 83	210		1
04688	Hexachlorocyclopentadiene	77-47-4	210	U 210	620		1
04688	Hexachloroethane	67-72-1	21	U 21	210		1
04688	Isophorone	78-59-1	21	U 21	210		1
04688	2-Methylphenol	95-48-7	41	U 41	210		1
04688	4-Methylphenol	106-44-5	41	U 41	210		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U 21	210		1
04688	3-Nitroaniline	99-09-2	41	U 41	210		1
04688	4-Nitroaniline	100-01-6	83	U 83	210		1
04688	Nitrobenzene	98-95-3	21	U 21	210		1
04688	2-Nitrophenol	88-75-5	21	U 21	210		1
04688	4-Nitrophenol	100-02-7	210	U 210	620		1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U 21	210		1
04688	N-Nitrosodiphenylamine	86-30-6	21	U 21	210		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	210	U 210	620		1
04688	Phenol	108-95-2	21	U 21	210		1

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Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4508 SDG#: DE045-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	21	U 21	210		1
04688	2,4,5-Trichlorophenol	95-95-4	41	U 41	210		1
04688	2,4,6-Trichlorophenol	88-06-2	41	U 41	210		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.83	U 0.83	2.1		1
10138	Acenaphthylene	208-96-8	0.41	U 0.41	2.1		1
10138	Anthracene	120-12-7	0.41	U 0.41	2.1		1
10138	Benzo(a)anthracene	56-55-3	0.83	U 0.83	2.1		1
10138	Benzo(a)pyrene	50-32-8	0.83	U 0.83	2.1		1
10138	Benzo(b)fluoranthene	205-99-2	0.83	U 0.83	2.1		1
10138	Benzo(g,h,i)perylene	191-24-2	0.83	U 0.83	2.1		1
10138	Benzo(k)fluoranthene	207-08-9	0.83	U 0.83	2.1		1
10138	Butylbenzylphthalate	85-68-7	7.4	U 7.4	22		1
10138	Di-n-butylphthalate	84-74-2	7.4	U 7.4	22		1
10138	Chrysene	218-01-9	0.41	U 0.41	2.1		1
10138	Dibenz(a,h)anthracene	53-70-3	0.83	U 0.83	2.1		1
10138	Diethylphthalate	84-66-2	7.4	U 7.4	22		1
10138	Dimethylphthalate	131-11-3	7.4	U 7.4	22		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	8.2	J 7.4	22		1
10138	Fluoranthene	206-44-0	0.83	U 0.83	2.1		1
10138	Fluorene	86-73-7	0.83	U 0.83	2.1		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.83	U 0.83	2.1		1
10138	1-Methylnaphthalene	90-12-0	0.83	U 0.83	2.1		1
10138	2-Methylnaphthalene	91-57-6	0.83	U 0.83	2.1		1
10138	Naphthalene	91-20-3	0.83	U 0.83	2.1		1
10138	N-Nitrosodimethylamine	62-75-9	0.83	U 0.83	2.1		1
10138	Di-n-octylphthalate	117-84-0	7.4	U 7.4	22		1
10138	Phenanthrene	85-01-8	0.83	U 0.83	2.1		1
10138	Pyrene	129-00-0	0.83	U 0.83	2.1		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.5	U 1.5	4.5		1
10401	Dalapon	75-99-0	5.4	U 5.4	11		1
10401	2,4-DB	94-82-6	0.77	U 0.77	2.1		1
10401	Dicamba	1918-00-9	0.50	U 0.50	1.5		1
10401	Dinoseb	88-85-7	0.99	U 0.99	3.0		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.99	U 0.99	2.1		1
10401	MCPA	94-74-6	94	U 94	310		1
10401	MCPP (Mecoprop)	93-65-2	93	U 93	310		1
10401	2,4,5-T	93-76-5	0.10	U 0.10	0.21		1
10401	2,4,5-TP	93-72-1	0.093	U 0.093	0.21		1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.							
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.082	U 0.082	0.21		1
01363	Alpha BHC	319-84-6	0.042	U 0.042	0.21		1

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SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4508 SDG#: DE045-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Beta BHC	319-85-7	0.074 U	0.074	0.21		1
01363	Gamma BHC - Lindane	58-89-9	0.042 U	0.042	0.21		1
01363	Chlordane	57-74-9	0.99 U	0.99	4.2		1
01363	p,p-DDD	72-54-8	0.082 U	0.082	0.42		1
01363	p,p-DDE	72-55-9	0.082 U	0.082	0.42		1
01363	p,p-DDT	50-29-3	0.082 U	0.082	0.42		1
01363	Delta BHC	319-86-8	0.045 U	0.045	0.21		1
01363	Dieldrin	60-57-1	0.082 U	0.082	0.42		1
01363	Endosulfan I	959-98-8	0.054 U	0.054	0.21		1
01363	Endosulfan II	33213-65-9	0.14 U	0.14	0.42		1
01363	Endosulfan Sulfate	1031-07-8	0.082 U	0.082	0.42		1
01363	Endrin	72-20-8	0.082 U	0.082	0.42		1
01363	Endrin Aldehyde	7421-93-4	0.082 U	0.082	0.42		1
01363	Endrin Ketone	53494-70-5	0.082 U	0.082	0.42		1
01363	Heptachlor	76-44-8	0.074 U	0.074	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.042 U	0.042	0.21		1
01363	Methoxychlor	72-43-5	0.42 U	0.42	2.1		1
01363	Mirex	2385-85-5	0.082 U	0.082	0.42		1
01363	Toxaphene	8001-35-2	2.7 U	2.7	8.2		1
The surrogate data is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	4.1		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	4.1		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	4.1		1
10225	PCB-1016	12674-11-2	0.41 U	0.41	2.1		1
10225	PCB-1221	11104-28-2	0.62 U	0.62	2.1		1
10225	PCB-1232	11141-16-5	0.64 U	0.64	2.1		1
10225	PCB-1242	53469-21-9	0.62 U	0.62	2.1		1
10225	PCB-1248	12672-29-6	0.41 U	0.41	2.1		1
10225	PCB-1254	11097-69-1	3.2	0.41	2.1		1
10225	PCB-1260	11096-82-5	2.1	0.41	2.1		1
10225	PCB-1262	37324-23-5	0.41 U	0.41	2.1		1
10225	PCB-1268	11100-14-4	0.41 U	0.41	2.1		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	27,300	6.23	24.8		1
07914	Boron	7440-42-8	15.7	1.10	6.19		1
01650	Calcium	7440-70-2	31,400	7.59	24.8		1
01654	Iron	7439-89-6	32,800	5.83	24.8		1
01656	Lithium	7439-93-2	34.3	0.27	2.5		1
01657	Magnesium	7439-95-4	9,100	3.14	12.4		1
06958	Manganese	7439-96-5	398	0.0965	0.619		1
10145	Phosphorus	7723-14-0	641	0.693	12.4		1
01662	Potassium	7440-09-7	6,980	22.3	61.9		1
01667	Sodium	7440-23-5	155	46.2	124		1

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Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4508 SDG#: DE045-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
07968	Strontium	7440-24-6	67.1	0.0767	0.619		1
06969	Tin	7440-31-5	2.30 J	1.24	12.4		1
06970	Titanium	7440-32-6	1,550	0.470	1.24		1
10146	Zirconium	7440-67-7	6.96	1.04	6.19		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.113 J	0.0721	0.240		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.81	0.0721	0.481		2
06126	Barium	7440-39-3	147	0.130	0.481		2
06127	Beryllium	7440-41-7	0.797	0.0192	0.120		2
06128	Cadmium	7440-43-9	0.371	0.0433	0.120		2
06131	Chromium	7440-47-3	43.6	0.144	0.481		2
06132	Cobalt	7440-48-4	11.6	0.0240	0.120		2
06133	Copper	7440-50-8	17.8	0.0793	0.481		2
06135	Lead	7439-92-1	12.9	0.0125	0.240		2
06138	Molybdenum	7439-98-7	0.614	0.0601	0.120		2
06139	Nickel	7440-02-0	21.8	0.120	0.481		2
06141	Selenium	7782-49-2	0.517	0.0481	0.481		2
06142	Silver	7440-22-4	0.0368 J	0.0144	0.120		2
06145	Thallium	7440-28-0	0.454	0.0360	0.120		2
06148	Vanadium	7440-62-2	83.9	0.0264	0.120		2
06149	Zinc	7440-66-6	113	0.673	3.60		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0343 J	0.0033	0.114		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.99	1.2		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.1 U	11.1	37.1		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.37 J	0.25	1.2		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	471	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.88	0.0100	0.0100		1

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SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
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E4508 SDG#: DE045-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		EPA 160.3 modified		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	19.2	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 14:59	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 03:21	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011 08:31	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011 03:31	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 03:51	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010 00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:09	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2

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E4508 SDG#: DE045-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:41	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:41	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:41	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:35	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 19:06	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 19:02	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 14:06	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	99	6.8	8.1		0.93
06192	Benzene	71-43-2	0.10 U	0.10	4.1		0.93
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.1		0.93
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.1		0.93
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.1		0.93
06192	Bromoform	75-25-2	0.41 U	0.41	4.1		0.93
06192	Bromomethane	74-83-9	0.25 U	0.25	4.1		0.93
06192	2-Butanone	78-93-3	20	1.2	8.1		0.93
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.1		0.93
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.1		0.93
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.1		0.93
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.1		0.93
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.1		0.93
06192	Chloroethane	75-00-3	0.13 U	0.13	4.1		0.93
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.1		0.93
06192	Chloroform	67-66-3	0.12 U	0.12	4.1		0.93
06192	Chloromethane	74-87-3	0.34 U	0.34	4.1		0.93
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.1		0.93
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.1		0.93
06192	Chlorotrifluoroethene	79-38-9	0.51 U	0.51	5.1		0.93
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.71 U	0.71	4.1		0.93
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	4.1		0.93
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	4.1		0.93
06192	Dibromomethane	74-95-3	0.24 U	0.24	4.1		0.93
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.1		0.93
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.1		0.93
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.1		0.93
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.1		0.93
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.1		0.93
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.1		0.93
06192	1,1-Dichloroethene	75-35-4	0.40 U	0.40	4.1		0.93
06192	cis-1,2-Dichloroethene	156-59-2	0.19 U	0.19	4.1		0.93
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.1		0.93
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	4.1		0.93
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.1		0.93
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	4.1		0.93
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.1		0.93
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.1		0.93
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	4.1		0.93
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.1		0.93
06192	Freon 113	76-13-1	0.11 U	0.11	4.1		0.93
06192	Freon 133a	75-88-7	0.51 U	0.51	5.1		0.93
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.1		0.93
06192	2-Hexanone	591-78-6	1.6 U	1.6	8.1		0.93
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.1		0.93
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.1		0.93
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	4.1		0.93
06192	4-Methyl-2-pentanone	108-10-1	0.40 U	0.40	8.1		0.93
06192	Methylene Chloride	75-09-2	0.96 J	0.24	4.1		0.93
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.1		0.93

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Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.1		0.93
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.1		0.93
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23 U	0.23	4.1		0.93
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	4.1		0.93
06192	Toluene	108-88-3	0.13 J	0.08	4.1		0.93
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.1		0.93
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	4.1		0.93
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	4.1		0.93
06192	1,1,2-Trichloroethane	79-00-5	0.27 U	0.27	4.1		0.93
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.1		0.93
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.1		0.93
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.1		0.93
06192	1,2,4-Trimethylbenzene	95-63-6	0.41 U	0.41	4.1		0.93
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.1		0.93
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	4.1		0.93
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	4.1		0.93
06192	o-Xylene	95-47-6	0.17 U	0.17	4.1		0.93
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.7 U	5.7	17		26.04
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	18.2 U	18.2	36.5		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200		1

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Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	1.1	J 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	3.7	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	2.1	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	3.6	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.4	J 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U 6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U 6.6	20		1
10138	Chrysene	218-01-9	3.6	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U 6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U 6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.2	J 6.6	20		1
10138	Fluoranthene	206-44-0	8.2	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U 0.73	1.8		1

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Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6 U	6.6	20		1
10138	Phenanthrene	85-01-8	2.7	0.73	1.8		1
10138	Pyrene	129-00-0	8.0	0.73	1.8		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.0		23.95
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	82	U 82	160	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	55	U 55	160	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U 110	330	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U 110	330	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	55	U 55	160	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	55	U 55	160	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	55	U 55	160	1000000 0	1
10132	HMX	2691-41-0	140	U 140	410	1000000 0	1
10132	Nitrobenzene	98-95-3	55	U 55	160	1000000 0	1
10132	Nitroglycerin	55-63-0	1,100	U 1,100	3,300	1000000 0	1
10132	2-Nitrotoluene	88-72-2	110	U 110	160	1000000 0	1
10132	3-Nitrotoluene	99-08-1	140	U 140	160	1000000 0	1
10132	4-Nitrotoluene	99-99-0	110	U 110	160	1000000 0	1
10132	PETN	78-11-5	1,100	U 1,100	3,300	1000000 0	1
10132	RDX	121-82-4	68	U 68	160	1000000 0	1
10132	Tetryl	479-45-8	84	U 84	160	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	55	U 55	160	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	55	U 55	160	1000000 0	1

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Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

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E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A	ug/kg	ug/kg	ug/kg	ug/kg	
		50-00-0	7,600	660	1,600		1
Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	55 U	55	180		50
10225	Aroclor 5442	12642-23-8	55 U	55	180		50
10225	Aroclor 5460	11126-42-4	55 U	55	180		50
10225	PCB-1016	12674-11-2	18 U	18	93		50
10225	PCB-1221	11104-28-2	27 U	27	93		50
10225	PCB-1232	11141-16-5	28 U	28	93		50
10225	PCB-1242	53469-21-9	27 U	27	93		50
10225	PCB-1248	12672-29-6	18 U	18	93		50
10225	PCB-1254	11097-69-1	18 U	18	93		50
10225	PCB-1260	11096-82-5	18 U	18	93		50
10225	PCB-1262	37324-23-5	18 U	18	93		50
10225	PCB-1268	11100-14-4	18 U	18	93		50
Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.							
GC Extractable TPH							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	2.7	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	8.1	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44 U	0.44	1.3		1
GC Miscellaneous							
		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	550		1
10501	Isopropanol	67-63-0	110 U	110	550		1
10501	Methanol	67-56-1	740	110	550		1
GC Miscellaneous							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.5 U	5.5	14		1
08283	Ethylene glycol	107-21-1	5.5 U	5.5	14		1
08283	Propylene glycol	57-55-6	5.5 U	5.5	14		1
The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
Terphenyls							
		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.8		1
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,000	5.40	21.5		1
07914	Boron	7440-42-8	4.55 J	0.955	5.36		1
01650	Calcium	7440-70-2	2,630	6.58	21.5		1
01654	Iron	7439-89-6	17,200	5.05	21.5		1
01656	Lithium	7439-93-2	21.1	0.24	2.1		1
01657	Magnesium	7439-95-4	3,660	2.72	10.7		1
06958	Manganese	7439-96-5	273	0.0837	0.536		1
10145	Phosphorus	7723-14-0	434	0.601	10.7		1
01662	Potassium	7440-09-7	3,090	19.3	53.6		1
01667	Sodium	7440-23-5	59.8 J	40.0	107		1
07968	Strontium	7440-24-6	19.4	0.0665	0.536		1
06969	Tin	7440-31-5	1.98 J	1.07	10.7		1
06970	Titanium	7440-32-6	1,030	0.408	1.07		1
10146	Zirconium	7440-67-7	2.33 J	0.901	5.36		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0644 U	0.0644	0.215		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.87	0.0644	0.429		2
06126	Barium	7440-39-3	110	0.116	0.429		2
06127	Beryllium	7440-41-7	0.562	0.0172	0.107		2
06128	Cadmium	7440-43-9	0.188	0.0386	0.107		2
06131	Chromium	7440-47-3	19.8	0.129	0.429		2
06132	Cobalt	7440-48-4	6.01	0.0215	0.107		2
06133	Copper	7440-50-8	9.66	0.0708	0.429		2
06135	Lead	7439-92-1	5.93	0.0112	0.215		2
06138	Molybdenum	7439-98-7	0.664	0.0536	0.107		2
06139	Nickel	7440-02-0	12.7	0.107	0.429		2
06141	Selenium	7782-49-2	0.127 J	0.0429	0.429		2
06142	Silver	7440-22-4	0.0388 J	0.0129	0.107		2
06145	Thallium	7440-28-0	0.286	0.0322	0.107		2
06148	Vanadium	7440-62-2	38.9	0.0236	0.107		2
06149	Zinc	7440-66-6	80.6	0.601	3.22		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0029 U	0.0029	0.102		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.88	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2 J	0.88	1.6		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.8		1
SW-846 7199							
			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.44 J	0.22	1.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry SW-846 9012B							
05895	21a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.55	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	432	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	7.63	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	8.6	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-282-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010 03:33	Laura M Krieger	0.93
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010 09:49	Jason M Long	26.04
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:33	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:53	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035223369	12/18/2010 17:53	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010 17:33	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/20/2011 15:01	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 15:35	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 03:53	Gregory J Drahovsky	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4509 SDG#: DE045-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/20/2010 21:57	Marie D John	23.95
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:32	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/04/2011 20:44	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 22:09	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 04:28	Lindsey K Lafferty	50
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 13:57	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 18:14	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 21:15	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 16:12	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
07914	Boron	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
01650	Calcium	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
01654	Iron	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
01656	Lithium	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
01657	Magnesium	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
01662	Potassium	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
06970	Titanium	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4509 SDG#: DE045-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:36	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 19:20	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202A	01/11/2011 19:20	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 19:25	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 14:22	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201A	12/30/2010 18:46	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201A	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 9

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4510 SDG#: DE045-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	47	6.6	7.9		0.91
06192	Benzene	71-43-2	0.1 U	0.1	4.0		0.91
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.0		0.91
06192	Bromochloromethane	74-97-5	0.33 U	0.33	4.0		0.91
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.0		0.91
06192	Bromoform	75-25-2	0.40 U	0.40	4.0		0.91
06192	Bromomethane	74-83-9	0.25 U	0.25	4.0		0.91
06192	2-Butanone	78-93-3	5.8 J	1.2	7.9		0.91
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.0		0.91
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.0		0.91
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.0		0.91
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.0		0.91
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.0		0.91
06192	Chloroethane	75-00-3	0.13 U	0.13	4.0		0.91
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30 U	0.30	4.0		0.91
06192	Chloroform	67-66-3	0.12 U	0.12	4.0		0.91
06192	Chloromethane	74-87-3	0.33 U	0.33	4.0		0.91
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.0		0.91
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.0		0.91
06192	Chlorotrifluoroethene	79-38-9	0.50 U	0.50	5.0		0.91
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.69 U	0.69	4.0		0.91
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	4.0		0.91
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	4.0		0.91
06192	Dibromomethane	74-95-3	0.24 U	0.24	4.0		0.91
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.0		0.91
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.0		0.91
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.0		0.91
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.0		0.91
06192	1,1-Dichloroethane	75-34-3	0.1 U	0.1	4.0		0.91
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.0		0.91
06192	1,1-Dichloroethene	75-35-4	0.39 U	0.39	4.0		0.91
06192	cis-1,2-Dichloroethene	156-59-2	0.19 U	0.19	4.0		0.91
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.0		0.91
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	4.0		0.91
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.0		0.91
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	4.0		0.91
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.0		0.91
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.0		0.91
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	4.0		0.91
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.0		0.91
06192	Freon 113	76-13-1	0.11 U	0.11	4.0		0.91
06192	Freon 133a	75-88-7	0.50 U	0.50	5.0		0.91
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.0		0.91
06192	2-Hexanone	591-78-6	1.6 U	1.6	7.9		0.91
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.0		0.91
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.0		0.91
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	4.0		0.91
06192	4-Methyl-2-pentanone	108-10-1	0.39 U	0.39	7.9		0.91
06192	Methylene Chloride	75-09-2	0.85 J	0.24	4.0		0.91
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.0		0.91

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4510 SDG#: DE045-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.1 U	0.1	4.0		0.91
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.0		0.91
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23 U	0.23	4.0		0.91
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	4.0		0.91
06192	Toluene	108-88-3	0.12 J	0.08	4.0		0.91
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.0		0.91
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	4.0		0.91
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	4.0		0.91
06192	1,1,2-Trichloroethane	79-00-5	0.27 U	0.27	4.0		0.91
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.0		0.91
06192	Trichlorofluoromethane	75-69-4	0.29 U	0.29	4.0		0.91
06192	1,2,3-Trichloropropane	96-18-4	0.33 U	0.33	4.0		0.91
06192	1,2,4-Trimethylbenzene	95-63-6	0.40 U	0.40	4.0		0.91
06192	1,3,5-Trimethylbenzene	108-67-8	0.1 U	0.1	4.0		0.91
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	4.0		0.91
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	4.0		0.91
06192	o-Xylene	95-47-6	0.17 U	0.17	4.0		0.91
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.5 U	4.5	13		20.49
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	18.3 U	18.3	36.5		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200		1

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Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

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E4510 SDG#: DE045-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.8		1
10138	Anthracene	120-12-7	0.37	U 0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U 0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U 0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U 0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U 6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U 6.6	20		1
10138	Chrysene	218-01-9	0.37	U 0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U 6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U 6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.6	J 6.6	20		1
10138	Fluoranthene	206-44-0	0.73	U 0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U 0.73	1.8		1

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SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4510 SDG#: DE045-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	14 J	6.6	20		1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1		22.05
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	82 U	82	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	55 U	55	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110 U	110	330	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110 U	110	330	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	55 U	55	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	55 U	55	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	55 U	55	160	10000000	1
10132	HMX	2691-41-0	140 U	140	410	10000000	1
10132	Nitrobenzene	98-95-3	55 U	55	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100 U	1,100	3,300	10000000	1
10132	2-Nitrotoluene	88-72-2	110 U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	140 U	140	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110 U	110	160	10000000	1
10132	PETN	78-11-5	1,100 U	1,100	3,300	10000000	1
10132	RDX	121-82-4	68 U	68	160	10000000	1
10132	Tetryl	479-45-8	84 U	84	160	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	55 U	55	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	55 U	55	160	10000000	1

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A	ug/kg	ug/kg	ug/kg	ug/kg	
		50-00-0	8,100	660	1,600		1
Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.55 U	0.55	1.9		1
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.9		1
10225	PCB-1242	53469-21-9	0.55 U	0.55	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.62 J	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.36 U	0.36	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
GC Extractable TPH							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	1.0 J	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44 U	0.44	1.3		1
GC Miscellaneous							
		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	550		1
10501	Isopropanol	67-63-0	110 U	110	550		1
10501	Methanol	67-56-1	330 J	110	550		1
GC Miscellaneous							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.5 U	5.5	14		1
08283	Ethylene glycol	107-21-1	5.5 U	5.5	14		1
08283	Propylene glycol	57-55-6	5.5 U	5.5	14		1
The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
Terphenyls							
		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6 U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6 U	1.6	3.8		1
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,100	5.30	21.1		1
07914	Boron	7440-42-8	5.08 J	0.937	5.27		1

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Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	2,150	6.46	21.1		1
01654	Iron	7439-89-6	16,500	4.96	21.1		1
01656	Lithium	7439-93-2	20.3	0.23	2.1		1
01657	Magnesium	7439-95-4	3,700	2.68	10.5		1
06958	Manganese	7439-96-5	236	0.0821	0.527		1
10145	Phosphorus	7723-14-0	477	0.590	10.5		1
01662	Potassium	7440-09-7	3,520	19.0	52.7		1
01667	Sodium	7440-23-5	83.3 J	39.3	105		1
07968	Strontium	7440-24-6	17.6	0.0653	0.527		1
06969	Tin	7440-31-5	2.05 J	1.05	10.5		1
06970	Titanium	7440-32-6	980	1.400	1.05		1
10146	Zirconium	7440-67-7	2.99 J	0.885	5.27		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.105 J	0.0632	0.211		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.22	0.0632	0.421		2
06126	Barium	7440-39-3	116	0.114	0.421		2
06127	Beryllium	7440-41-7	0.599	0.0169	0.105		2
06128	Cadmium	7440-43-9	0.229	0.0379	0.105		2
06131	Chromium	7440-47-3	21.0	0.126	0.421		2
06132	Cobalt	7440-48-4	6.15	0.0211	0.105		2
06133	Copper	7440-50-8	10.4	0.0695	0.421		2
06135	Lead	7439-92-1	5.86	0.0110	0.211		2
06138	Molybdenum	7439-98-7	0.748	0.0527	0.105		2
06139	Nickel	7440-02-0	13.3	0.105	0.421		2
06141	Selenium	7782-49-2	0.135 J	0.0421	0.421		2
06142	Silver	7440-22-4	0.0361 J	0.0126	0.105		2
06145	Thallium	7440-28-0	0.285	0.0316	0.105		2
06148	Vanadium	7440-62-2	39.3	0.0232	0.105		2
06149	Zinc	7440-66-6	65.9	0.590	3.16		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.105		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6	0.88	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2 J	0.88	1.6		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	32.9		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.57 J	0.22	1.1		1

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SL-282-SA5B-SB-7.0-8.0

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LLI Group # 1226239
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E4510 SDG#: DE045-10

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Wet Chemistry							
05895	21a Cyanide by 9012B	57-12-5	mg/kg 0.20 U	mg/kg 0.20	mg/kg 0.55	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	mV 437	mV 10.0	mV 10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	Std. Units 7.55	Std. Units 0.0100	Std. Units 0.0100	Std. Units	1
Wet Chemistry							
EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	% 8.7	% 0.50	% 0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-282-SA5B-SB-7.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010 03:56	Laura M Krieger	0.91
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010 10:09	Jason M Long	20.49
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:36	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:53	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010 17:36	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011 13:37	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 16:10	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 04:25	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4510 SDG#: DE045-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/20/2010 22:33	Marie D John	22.05
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:36	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/04/2011 21:27	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 22:19	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 04:47	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 14:22	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 18:29	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 22:35	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 19:11	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:47	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4510 SDG#: DE045-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:47	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:47	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:37	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 20:03	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202A	01/11/2011 20:03	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 19:48	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 14:38	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201A	12/30/2010 18:48	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201A	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	16	7.6	9.0		0.95
06192	Benzene	71-43-2	0.11 U	0.11	4.5		0.95
06192	Bromobenzene	108-86-1	0.15 U	0.15	4.5		0.95
06192	Bromochloromethane	74-97-5	0.37 U	0.37	4.5		0.95
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.5		0.95
06192	Bromoform	75-25-2	0.45 U	0.45	4.5		0.95
06192	Bromomethane	74-83-9	0.28 U	0.28	4.5		0.95
06192	2-Butanone	78-93-3	1.4 U	1.4	9.0		0.95
06192	n-Butylbenzene	104-51-8	0.14 U	0.14	4.5		0.95
06192	sec-Butylbenzene	135-98-8	0.07 U	0.07	4.5		0.95
06192	tert-Butylbenzene	98-06-6	0.18 U	0.18	4.5		0.95
06192	Carbon Tetrachloride	56-23-5	0.16 U	0.16	4.5		0.95
06192	Chlorobenzene	108-90-7	0.12 U	0.12	4.5		0.95
06192	Chloroethane	75-00-3	0.15 U	0.15	4.5		0.95
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.34 U	0.34	4.5		0.95
06192	Chloroform	67-66-3	0.14 U	0.14	4.5		0.95
06192	Chloromethane	74-87-3	0.37 U	0.37	4.5		0.95
06192	2-Chlorotoluene	95-49-8	0.16 U	0.16	4.5		0.95
06192	4-Chlorotoluene	106-43-4	0.16 U	0.16	4.5		0.95
06192	Chlorotrifluoroethene	79-38-9	0.57 U	0.57	5.6		0.95
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.79 U	0.79	4.5		0.95
06192	Dibromochloromethane	124-48-1	0.23 U	0.23	4.5		0.95
06192	1,2-Dibromoethane	106-93-4	0.19 U	0.19	4.5		0.95
06192	Dibromomethane	74-95-3	0.27 U	0.27	4.5		0.95
06192	1,2-Dichlorobenzene	95-50-1	0.10 U	0.10	4.5		0.95
06192	1,3-Dichlorobenzene	541-73-1	0.14 U	0.14	4.5		0.95
06192	1,4-Dichlorobenzene	106-46-7	0.18 U	0.18	4.5		0.95
06192	Dichlorodifluoromethane	75-71-8	0.14 U	0.14	4.5		0.95
06192	1,1-Dichloroethane	75-34-3	0.11 U	0.11	4.5		0.95
06192	1,2-Dichloroethane	107-06-2	0.17 U	0.17	4.5		0.95
06192	1,1-Dichloroethene	75-35-4	0.44 U	0.44	4.5		0.95
06192	cis-1,2-Dichloroethene	156-59-2	0.22 U	0.22	4.5		0.95
06192	trans-1,2-Dichloroethene	156-60-5	0.14 U	0.14	4.5		0.95
06192	1,2-Dichloropropane	78-87-5	0.19 U	0.19	4.5		0.95
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.5		0.95
06192	2,2-Dichloropropane	594-20-7	0.19 U	0.19	4.5		0.95
06192	1,1-Dichloropropene	563-58-6	0.15 U	0.15	4.5		0.95
06192	cis-1,3-Dichloropropene	10061-01-5	0.18 U	0.18	4.5		0.95
06192	trans-1,3-Dichloropropene	10061-02-6	0.19 U	0.19	4.5		0.95
06192	Ethylbenzene	100-41-4	0.07 U	0.07	4.5		0.95
06192	Freon 113	76-13-1	0.12 U	0.12	4.5		0.95
06192	Freon 133a	75-88-7	0.57 U	0.57	5.6		0.95
06192	Hexachlorobutadiene	87-68-3	0.16 U	0.16	4.5		0.95
06192	2-Hexanone	591-78-6	1.8 U	1.8	9.0		0.95
06192	Isopropylbenzene	98-82-8	0.07 U	0.07	4.5		0.95
06192	p-Isopropyltoluene	99-87-6	0.12 U	0.12	4.5		0.95
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.24 U	0.24	4.5		0.95
06192	4-Methyl-2-pentanone	108-10-1	0.44 U	0.44	9.0		0.95
06192	Methylene Chloride	75-09-2	0.73 J	0.27	4.5		0.95
06192	n-Propylbenzene	103-65-1	0.08 U	0.08	4.5		0.95

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.11 U	0.11	4.5		0.95
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12 U	0.12	4.5		0.95
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.26 U	0.26	4.5		0.95
06192	Tetrachloroethene	127-18-4	0.23 U	0.23	4.5		0.95
06192	Toluene	108-88-3	0.11 J	0.09	4.5		0.95
06192	1,2,3-Trichlorobenzene	87-61-6	0.16 U	0.16	4.5		0.95
06192	1,2,4-Trichlorobenzene	120-82-1	0.20 U	0.20	4.5		0.95
06192	1,1,1-Trichloroethane	71-55-6	0.23 U	0.23	4.5		0.95
06192	1,1,2-Trichloroethane	79-00-5	0.30 U	0.30	4.5		0.95
06192	Trichloroethene	79-01-6	0.17 U	0.17	4.5		0.95
06192	Trichlorofluoromethane	75-69-4	0.33 U	0.33	4.5		0.95
06192	1,2,3-Trichloropropane	96-18-4	0.37 U	0.37	4.5		0.95
06192	1,2,4-Trimethylbenzene	95-63-6	0.45 U	0.45	4.5		0.95
06192	1,3,5-Trimethylbenzene	108-67-8	0.11 U	0.11	4.5		0.95
06192	Vinyl Chloride	75-01-4	0.23 U	0.23	4.5		0.95
06192	m+p-Xylene	179601-23-1	0.19 U	0.19	4.5		0.95
06192	o-Xylene	95-47-6	0.19 U	0.19	4.5		0.95
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.7 U	4.7	14		19.57
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	19.9 U	19.9	39.8		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200 U	200	600		1
04688	Benzidine	92-87-5	1,400 U	1,400	4,000		1
04688	Benzoic acid	65-85-0	200 U	200	600		1
04688	Benzyl alcohol	100-51-6	200 U	200	600		1
04688	4-Bromophenyl-phenylether	101-55-3	20 U	20	200		1
04688	Carbazole	86-74-8	20 U	20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40 U	40	200		1
04688	4-Chloroaniline	106-47-8	80 U	80	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20 U	20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20 U	20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20 U	20	200		1
04688	2-Chloronaphthalene	91-58-7	20 U	20	200		1
04688	2-Chlorophenol	95-57-8	20 U	20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40 U	40	200		1
04688	Dibenzofuran	132-64-9	20 U	20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20 U	20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20 U	20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20 U	20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120 U	120	400		1
04688	2,4-Dichlorophenol	120-83-2	20 U	20	200		1
04688	2,4-Dimethylphenol	105-67-9	40 U	40	200		1
04688	3,5-Dimethylphenol	108-68-9	40 U	40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200 U	200	600		1
04688	2,4-Dinitrophenol	51-28-5	800 U	800	2,400		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 01/27/2011 12:46

Chantilly VA 20151

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	40	U 40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200		1
04688	Hexachlorobenzene	118-74-1	20	U 20	200		1
04688	Hexachlorobutadiene	87-68-3	80	U 80	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	600		1
04688	Hexachloroethane	67-72-1	20	U 20	200		1
04688	Isophorone	78-59-1	20	U 20	200		1
04688	2-Methylphenol	95-48-7	40	U 40	200		1
04688	4-Methylphenol	106-44-5	40	U 40	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U 20	200		1
04688	3-Nitroaniline	99-09-2	40	U 40	200		1
04688	4-Nitroaniline	100-01-6	80	U 80	200		1
04688	Nitrobenzene	98-95-3	20	U 20	200		1
04688	2-Nitrophenol	88-75-5	20	U 20	200		1
04688	4-Nitrophenol	100-02-7	200	U 200	600		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U 200	600		1
04688	Phenol	108-95-2	20	U 20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U 20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U 40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U 40	200		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.80	U 0.80	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U 0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U 0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.80	U 0.80	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.80	U 0.80	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.80	U 0.80	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U 0.80	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U 0.80	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U 7.2	22		1
10138	Di-n-butylphthalate	84-74-2	8.1	J 7.2	22		1
10138	Chrysene	218-01-9	0.40	U 0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U 0.80	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U 7.2	22		1
10138	Dimethylphthalate	131-11-3	7.2	U 7.2	22		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J 7.2	22		1
10138	Fluoranthene	206-44-0	0.80	U 0.80	2.0		1
10138	Fluorene	86-73-7	0.80	U 0.80	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U 0.80	2.0		1

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Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.80 U	0.80	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.80 U	0.80	2.0		1
10138	Naphthalene	91-20-3	0.84 J	0.80	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.80 U	0.80	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2 U	7.2	22		1
10138	Phenanthrene	85-01-8	0.80 U	0.80	2.0		1
10138	Pyrene	129-00-0	0.80 U	0.80	2.0		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.0		21.51
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	90	U 90	180	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	60	U 60	180	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U 120	360	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U 120	360	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	60	U 60	180	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	60	U 60	180	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	60	U 60	180	1000000 0	1
10132	HMX	2691-41-0	150	U 150	450	1000000 0	1
10132	Nitrobenzene	98-95-3	60	U 60	180	1000000 0	1
10132	Nitroglycerin	55-63-0	1,200	U 1,200	3,600	1000000 0	1
10132	2-Nitrotoluene	88-72-2	120	U 120	180	1000000 0	1
10132	3-Nitrotoluene	99-08-1	150	U 150	180	1000000 0	1
10132	4-Nitrotoluene	99-99-0	120	U 120	180	1000000 0	1
10132	PETN	78-11-5	1,200	U 1,200	3,600	1000000 0	1
10132	RDX	121-82-4	75	U 75	180	1000000 0	1
10132	Tetryl	479-45-8	91	U 91	180	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	60	U 60	180	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	60	U 60	180	1000000 0	1

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A	ug/kg	ug/kg	ug/kg	ug/kg	
		50-00-0	11,000	720	1,800		1
Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.9		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39 U	0.39	2.0		1
10225	PCB-1221	11104-28-2	0.60 U	0.60	2.0		1
10225	PCB-1232	11141-16-5	0.62 U	0.62	2.0		1
10225	PCB-1242	53469-21-9	0.60 U	0.60	2.0		1
10225	PCB-1248	12672-29-6	0.39 U	0.39	2.0		1
10225	PCB-1254	11097-69-1	0.52 J	0.39	2.0		1
10225	PCB-1260	11096-82-5	0.39 U	0.39	2.0		1
10225	PCB-1262	37324-23-5	0.39 U	0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39 U	0.39	2.0		1
GC Extractable TPH							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.48 U	0.48	1.4		1
10199	EFH (C15-C20)	n.a.	0.48 U	0.48	1.4		1
10199	EFH (C21-C30)	n.a.	3.6	0.48	1.4		1
10199	EFH (C30 - C40)	n.a.	7.6	0.48	1.4		1
10199	EFH (C8-C11)	n.a.	0.48 U	0.48	1.4		1
GC Miscellaneous							
		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120 U	120	600		1
10501	Isopropanol	67-63-0	120 U	120	600		1
10501	Methanol	67-56-1	550 J	120	600		1
GC Miscellaneous							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	6.0 U	6.0	15		1
08283	Ethylene glycol	107-21-1	6.0 U	6.0	15		1
08283	Propylene glycol	57-55-6	6.0 U	6.0	15		1
The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
Terphenyls							
		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.8 U	1.8	4.2		1
10318	o-Terphenyl	84-15-1	1.8 U	1.8	4.2		1
10318	p-Terphenyl	92-94-4	1.8 U	1.8	4.2		1
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	33,000	5.95	23.7		1
07914	Boron	7440-42-8	12.3	1.05	5.91		1

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SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	11,100	7.25	23.7		1
01654	Iron	7439-89-6	35,400	11.1	47.3		2
01656	Lithium	7439-93-2	23.6	0.26	2.4		1
01657	Magnesium	7439-95-4	7,620	3.00	11.8		1
06958	Manganese	7439-96-5	533	0.0923	0.591		1
10145	Phosphorus	7723-14-0	307	0.662	11.8		1
01662	Potassium	7440-09-7	4,470	21.3	59.1		1
01667	Sodium	7440-23-5	268	44.1	118		1
07968	Strontium	7440-24-6	35.2	0.0733	0.591		1
06969	Tin	7440-31-5	2.56 J	1.18	11.8		1
06970	Titanium	7440-32-6	1,420	0.450	1.18		1
10146	Zirconium	7440-67-7	7.39	0.994	5.91		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.172 J	0.0710	0.237		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.29	0.0710	0.473		2
06126	Barium	7440-39-3	160	0.128	0.473		2
06127	Beryllium	7440-41-7	1.03	0.0189	0.118		2
06128	Cadmium	7440-43-9	0.304	0.0426	0.118		2
06131	Chromium	7440-47-3	47.4	0.142	0.473		2
06132	Cobalt	7440-48-4	11.1	0.0237	0.118		2
06133	Copper	7440-50-8	20.1	0.0781	0.473		2
06135	Lead	7439-92-1	13.7	0.0123	0.237		2
06138	Molybdenum	7439-98-7	0.552	0.0591	0.118		2
06139	Nickel	7440-02-0	23.4	0.118	0.473		2
06141	Selenium	7782-49-2	0.197 J	0.0473	0.473		2
06142	Silver	7440-22-4	0.0599 J	0.0142	0.118		2
06145	Thallium	7440-28-0	0.395	0.0355	0.118		2
06148	Vanadium	7440-62-2	79.5	0.0260	0.118		2
06149	Zinc	7440-66-6	98.8	0.662	3.55		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0092 J	0.0033	0.115		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6	0.96	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2 J	0.96	1.8		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8 U	10.8	35.8		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.59 J	0.24	1.2		1

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Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

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14420 Albemarle Point Place
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Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.21 U	0.21	0.58		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	375	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.86	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	16.3	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-281-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010 04:18	Laura M Krieger	0.95
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010 10:29	Jason M Long	19.57
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:39	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010 17:40	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011 13:54	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 16:46	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 04:57	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1

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Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/20/2010 23:10	Marie D John	21.51
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:39	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/04/2011 22:09	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 22:28	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 05:05	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 14:47	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 18:44	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 20:43	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 19:56	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/31/2010 11:08	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2

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Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4511 SDG#: DE045-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:40	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 20:17	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202A	01/11/2011 20:17	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 20:11	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 14:46	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201A	12/30/2010 18:49	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201A	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 9

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	43	7.7	9.3		1.01
06192	Benzene	71-43-2	0.12 U	0.12	4.6		1.01
06192	Bromobenzene	108-86-1	0.15 U	0.15	4.6		1.01
06192	Bromochloromethane	74-97-5	0.38 U	0.38	4.6		1.01
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.6		1.01
06192	Bromoform	75-25-2	0.46 U	0.46	4.6		1.01
06192	Bromomethane	74-83-9	0.29 U	0.29	4.6		1.01
06192	2-Butanone	78-93-3	7.4 J	1.4	9.3		1.01
06192	n-Butylbenzene	104-51-8	0.14 U	0.14	4.6		1.01
06192	sec-Butylbenzene	135-98-8	0.07 U	0.07	4.6		1.01
06192	tert-Butylbenzene	98-06-6	0.18 U	0.18	4.6		1.01
06192	Carbon Tetrachloride	56-23-5	0.16 U	0.16	4.6		1.01
06192	Chlorobenzene	108-90-7	0.13 U	0.13	4.6		1.01
06192	Chloroethane	75-00-3	0.15 U	0.15	4.6		1.01
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.35 U	0.35	4.6		1.01
06192	Chloroform	67-66-3	0.14 U	0.14	4.6		1.01
06192	Chloromethane	74-87-3	0.38 U	0.38	4.6		1.01
06192	2-Chlorotoluene	95-49-8	0.16 U	0.16	4.6		1.01
06192	4-Chlorotoluene	106-43-4	0.16 U	0.16	4.6		1.01
06192	Chlorotrifluoroethene	79-38-9	0.58 U	0.58	5.8		1.01
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.81 U	0.81	4.6		1.01
06192	Dibromochloromethane	124-48-1	0.23 U	0.23	4.6		1.01
06192	1,2-Dibromoethane	106-93-4	0.20 U	0.20	4.6		1.01
06192	Dibromomethane	74-95-3	0.28 U	0.28	4.6		1.01
06192	1,2-Dichlorobenzene	95-50-1	0.10 U	0.10	4.6		1.01
06192	1,3-Dichlorobenzene	541-73-1	0.14 U	0.14	4.6		1.01
06192	1,4-Dichlorobenzene	106-46-7	0.18 U	0.18	4.6		1.01
06192	Dichlorodifluoromethane	75-71-8	0.14 U	0.14	4.6		1.01
06192	1,1-Dichloroethane	75-34-3	0.12 U	0.12	4.6		1.01
06192	1,2-Dichloroethane	107-06-2	0.17 U	0.17	4.6		1.01
06192	1,1-Dichloroethene	75-35-4	0.45 U	0.45	4.6		1.01
06192	cis-1,2-Dichloroethene	156-59-2	0.22 U	0.22	4.6		1.01
06192	trans-1,2-Dichloroethene	156-60-5	0.14 U	0.14	4.6		1.01
06192	1,2-Dichloropropane	78-87-5	0.20 U	0.20	4.6		1.01
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.6		1.01
06192	2,2-Dichloropropane	594-20-7	0.20 U	0.20	4.6		1.01
06192	1,1-Dichloropropene	563-58-6	0.15 U	0.15	4.6		1.01
06192	cis-1,3-Dichloropropene	10061-01-5	0.18 U	0.18	4.6		1.01
06192	trans-1,3-Dichloropropene	10061-02-6	0.20 U	0.20	4.6		1.01
06192	Ethylbenzene	100-41-4	0.07 U	0.07	4.6		1.01
06192	Freon 113	76-13-1	0.13 U	0.13	4.6		1.01
06192	Freon 133a	75-88-7	0.58 U	0.58	5.8		1.01
06192	Hexachlorobutadiene	87-68-3	0.16 U	0.16	4.6		1.01
06192	2-Hexanone	591-78-6	1.9 U	1.9	9.3		1.01
06192	Isopropylbenzene	98-82-8	0.07 U	0.07	4.6		1.01
06192	p-Isopropyltoluene	99-87-6	0.13 U	0.13	4.6		1.01
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.24 U	0.24	4.6		1.01
06192	4-Methyl-2-pentanone	108-10-1	0.45 U	0.45	9.3		1.01
06192	Methylene Chloride	75-09-2	0.81 J	0.28	4.6		1.01
06192	n-Propylbenzene	103-65-1	0.08 U	0.08	4.6		1.01

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Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.12 U	0.12	4.6		1.01
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.13 U	0.13	4.6		1.01
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	4.6		1.01
06192	Tetrachloroethene	127-18-4	0.23 U	0.23	4.6		1.01
06192	Toluene	108-88-3	0.16 J	0.09	4.6		1.01
06192	1,2,3-Trichlorobenzene	87-61-6	0.16 U	0.16	4.6		1.01
06192	1,2,4-Trichlorobenzene	120-82-1	0.21 U	0.21	4.6		1.01
06192	1,1,1-Trichloroethane	71-55-6	0.23 U	0.23	4.6		1.01
06192	1,1,2-Trichloroethane	79-00-5	0.31 U	0.31	4.6		1.01
06192	Trichloroethene	79-01-6	0.17 U	0.17	4.6		1.01
06192	Trichlorofluoromethane	75-69-4	0.34 U	0.34	4.6		1.01
06192	1,2,3-Trichloropropane	96-18-4	0.38 U	0.38	4.6		1.01
06192	1,2,4-Trimethylbenzene	95-63-6	0.46 U	0.46	4.6		1.01
06192	1,3,5-Trimethylbenzene	108-67-8	0.12 U	0.12	4.6		1.01
06192	Vinyl Chloride	75-01-4	0.23 U	0.23	4.6		1.01
06192	m+p-Xylene	179601-23-1	0.20 U	0.20	4.6		1.01
06192	o-Xylene	95-47-6	0.20 U	0.20	4.6		1.01
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.8 U	4.8	14		20.94
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	27.7 J	19.0	38.1		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U 760	2,300		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U 0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U 0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U 0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U 0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U 0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21		1
10138	Chrysene	218-01-9	0.38	U 0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U 0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U 6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U 6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	30	6.9	21		1
10138	Fluoranthene	206-44-0	0.76	U 0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U 0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U 0.76	1.9		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76 U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76 U	0.76	1.9		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.0		22.4
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	86	U 86	170	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	57	U 57	170	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U 110	340	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U 110	340	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	57	U 57	170	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	57	U 57	170	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	57	U 57	170	1000000 0	1
10132	HMX	2691-41-0	140	U 140	430	1000000 0	1
10132	Nitrobenzene	98-95-3	57	U 57	170	1000000 0	1
10132	Nitroglycerin	55-63-0	1,100	U 1,100	3,400	1000000 0	1
10132	2-Nitrotoluene	88-72-2	110	U 110	170	1000000 0	1
10132	3-Nitrotoluene	99-08-1	140	U 140	170	1000000 0	1
10132	4-Nitrotoluene	99-99-0	110	U 110	170	1000000 0	1
10132	PETN	78-11-5	1,100	U 1,100	3,400	1000000 0	1
10132	RDX	121-82-4	71	U 71	170	1000000 0	1
10132	Tetryl	479-45-8	87	U 87	170	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	57	U 57	170	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	57	U 57	170	1000000 0	1

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Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A	ug/kg	ug/kg	ug/kg	ug/kg	
		50-00-0	11,000	680	1,700		1
Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.57 U	0.57	1.9		1
10225	PCB-1232	11141-16-5	0.59 U	0.59	1.9		1
10225	PCB-1242	53469-21-9	0.57 U	0.57	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.71 J	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.38 U	0.38	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Extractable TPH							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.46 U	0.46	1.4		1
10199	EFH (C15-C20)	n.a.	0.46 U	0.46	1.4		1
10199	EFH (C21-C30)	n.a.	1.8	0.46	1.4		1
10199	EFH (C30 - C40)	n.a.	3.8	0.46	1.4		1
10199	EFH (C8-C11)	n.a.	0.46 U	0.46	1.4		1
GC Miscellaneous							
		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	570		1
10501	Isopropanol	67-63-0	110 U	110	570		1
10501	Methanol	67-56-1	590	110	570		1
GC Miscellaneous							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7 U	5.7	14		1
08283	Ethylene glycol	107-21-1	5.7 U	5.7	14		1
08283	Propylene glycol	57-55-6	5.7 U	5.7	14		1
The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
Terphenyls							
		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.0		1
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	24,500	5.74	22.8		1
07914	Boron	7440-42-8	5.71 J	1.02	5.71		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	2,430	7.00	22.8		1
01654	Iron	7439-89-6	21,000	5.38	22.8		1
01656	Lithium	7439-93-2	22.7	0.25	2.3		1
01657	Magnesium	7439-95-4	4,430	2.90	11.4		1
06958	Manganese	7439-96-5	212	0.0890	0.571		1
10145	Phosphorus	7723-14-0	282	0.639	11.4		1
01662	Potassium	7440-09-7	2,440	20.5	57.1		1
01667	Sodium	7440-23-5	184	42.6	114		1
07968	Strontium	7440-24-6	21.5	0.0708	0.571		1
06969	Tin	7440-31-5	2.56 J	1.14	11.4		1
06970	Titanium	7440-32-6	1,190	0.434	1.14		1
10146	Zirconium	7440-67-7	4.12 J	0.959	5.71		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0766 J	0.0659	0.220		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.74	0.0659	0.439		2
06126	Barium	7440-39-3	135	0.119	0.439		2
06127	Beryllium	7440-41-7	0.903	0.0176	0.110		2
06128	Cadmium	7440-43-9	0.116	0.0395	0.110		2
06131	Chromium	7440-47-3	27.0	0.132	0.439		2
06132	Cobalt	7440-48-4	7.60	0.0220	0.110		2
06133	Copper	7440-50-8	9.54	0.0724	0.439		2
06135	Lead	7439-92-1	8.13	0.0114	0.220		2
06138	Molybdenum	7439-98-7	0.819	0.0549	0.110		2
06139	Nickel	7440-02-0	15.4	0.110	0.439		2
06141	Selenium	7782-49-2	0.171 J	0.0439	0.439		2
06142	Silver	7440-22-4	0.0637 J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.333	0.0329	0.110		2
06148	Vanadium	7440-62-2	51.8	0.0241	0.110		2
06149	Zinc	7440-66-6	59.8	0.615	3.29		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0034 J	0.0032	0.113		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.9	0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.4 J	0.91	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.2		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.65 J	0.23	1.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05895	21a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.56	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	280	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	7.67	0.0100	0.0100	Std. Units	1
Wet Chemistry							
EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	12.4	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-281-SA5B-SB-8.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010 04:41	Laura M Krieger	1.01
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010 10:49	Jason M Long	20.94
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:43	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010 17:43	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011 14:11	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 20:46	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 13:30	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4512 SDG#: DE045-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/20/2010 23:46	Marie D John	22.4
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:43	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/04/2011 22:51	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 22:38	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 05:24	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 15:12	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 18:58	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 22:51	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 20:41	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4512 SDG#: DE045-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:41	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 20:31	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202A	01/11/2011 20:31	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 20:34	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 15:02	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201A	12/30/2010 18:50	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201A	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182103A	12/21/2010 17:40	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039403A	12/21/2010 17:40	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 9

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.8 U	7.8	9.4		1.04
06192	Benzene	71-43-2	0.12 U	0.12	4.7		1.04
06192	Bromobenzene	108-86-1	0.15 U	0.15	4.7		1.04
06192	Bromochloromethane	74-97-5	0.39 U	0.39	4.7		1.04
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.7		1.04
06192	Bromoform	75-25-2	0.47 U	0.47	4.7		1.04
06192	Bromomethane	74-83-9	0.29 U	0.29	4.7		1.04
06192	2-Butanone	78-93-3	1.4 U	1.4	9.4		1.04
06192	n-Butylbenzene	104-51-8	0.14 U	0.14	4.7		1.04
06192	sec-Butylbenzene	135-98-8	0.07 U	0.07	4.7		1.04
06192	tert-Butylbenzene	98-06-6	0.19 U	0.19	4.7		1.04
06192	Carbon Tetrachloride	56-23-5	0.16 U	0.16	4.7		1.04
06192	Chlorobenzene	108-90-7	0.13 U	0.13	4.7		1.04
06192	Chloroethane	75-00-3	0.15 U	0.15	4.7		1.04
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.35 U	0.35	4.7		1.04
06192	Chloroform	67-66-3	0.14 U	0.14	4.7		1.04
06192	Chloromethane	74-87-3	0.39 U	0.39	4.7		1.04
06192	2-Chlorotoluene	95-49-8	0.16 U	0.16	4.7		1.04
06192	4-Chlorotoluene	106-43-4	0.16 U	0.16	4.7		1.04
06192	Chlorotrifluoroethene	79-38-9	0.58 U	0.58	5.8		1.04
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.82 U	0.82	4.7		1.04
06192	Dibromochloromethane	124-48-1	0.23 U	0.23	4.7		1.04
06192	1,2-Dibromoethane	106-93-4	0.20 U	0.20	4.7		1.04
06192	Dibromomethane	74-95-3	0.28 U	0.28	4.7		1.04
06192	1,2-Dichlorobenzene	95-50-1	0.11 U	0.11	4.7		1.04
06192	1,3-Dichlorobenzene	541-73-1	0.14 U	0.14	4.7		1.04
06192	1,4-Dichlorobenzene	106-46-7	0.19 U	0.19	4.7		1.04
06192	Dichlorodifluoromethane	75-71-8	0.14 U	0.14	4.7		1.04
06192	1,1-Dichloroethane	75-34-3	0.12 U	0.12	4.7		1.04
06192	1,2-Dichloroethane	107-06-2	0.18 U	0.18	4.7		1.04
06192	1,1-Dichloroethene	75-35-4	0.46 U	0.46	4.7		1.04
06192	cis-1,2-Dichloroethene	156-59-2	0.22 U	0.22	4.7		1.04
06192	trans-1,2-Dichloroethene	156-60-5	0.14 U	0.14	4.7		1.04
06192	1,2-Dichloropropane	78-87-5	0.20 U	0.20	4.7		1.04
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.7		1.04
06192	2,2-Dichloropropane	594-20-7	0.20 U	0.20	4.7		1.04
06192	1,1-Dichloropropene	563-58-6	0.15 U	0.15	4.7		1.04
06192	cis-1,3-Dichloropropene	10061-01-5	0.19 U	0.19	4.7		1.04
06192	trans-1,3-Dichloropropene	10061-02-6	0.20 U	0.20	4.7		1.04
06192	Ethylbenzene	100-41-4	0.07 U	0.07	4.7		1.04
06192	Freon 113	76-13-1	0.13 U	0.13	4.7		1.04
06192	Freon 133a	75-88-7	0.58 U	0.58	5.8		1.04
06192	Hexachlorobutadiene	87-68-3	0.16 U	0.16	4.7		1.04
06192	2-Hexanone	591-78-6	1.9 U	1.9	9.4		1.04
06192	Isopropylbenzene	98-82-8	0.07 U	0.07	4.7		1.04
06192	p-Isopropyltoluene	99-87-6	0.13 U	0.13	4.7		1.04
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.25 U	0.25	4.7		1.04
06192	4-Methyl-2-pentanone	108-10-1	0.46 U	0.46	9.4		1.04
06192	Methylene Chloride	75-09-2	0.93 J	0.28	4.7		1.04
06192	n-Propylbenzene	103-65-1	0.08 U	0.08	4.7		1.04

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Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.12 U	0.12	4.7		1.04
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.13 U	0.13	4.7		1.04
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	4.7		1.04
06192	Tetrachloroethene	127-18-4	0.23 U	0.23	4.7		1.04
06192	Toluene	108-88-3	0.15 J	0.09	4.7		1.04
06192	1,2,3-Trichlorobenzene	87-61-6	0.16 U	0.16	4.7		1.04
06192	1,2,4-Trichlorobenzene	120-82-1	0.21 U	0.21	4.7		1.04
06192	1,1,1-Trichloroethane	71-55-6	0.23 U	0.23	4.7		1.04
06192	1,1,2-Trichloroethane	79-00-5	0.32 U	0.32	4.7		1.04
06192	Trichloroethene	79-01-6	0.18 U	0.18	4.7		1.04
06192	Trichlorofluoromethane	75-69-4	0.34 U	0.34	4.7		1.04
06192	1,2,3-Trichloropropane	96-18-4	0.39 U	0.39	4.7		1.04
06192	1,2,4-Trimethylbenzene	95-63-6	0.47 U	0.47	4.7		1.04
06192	1,3,5-Trimethylbenzene	108-67-8	0.12 U	0.12	4.7		1.04
06192	Vinyl Chloride	75-01-4	0.23 U	0.23	4.7		1.04
06192	m+p-Xylene	179601-23-1	0.20 U	0.20	4.7		1.04
06192	o-Xylene	95-47-6	0.20 U	0.20	4.7		1.04
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.7 U	4.7	14		21.04
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	76.2	18.8	37.5		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190		1
04688	4-Chloroaniline	106-47-8	75	U 75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	750	U 750	2,200		1

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Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	37	U 37	190		1
04688	4-Methylphenol	106-44-5	37	U 37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	37	U 37	190		1
04688	4-Nitroaniline	100-01-6	75	U 75	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U 0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.9		1
10138	Anthracene	120-12-7	0.37	U 0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.75	U 0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.75	U 0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U 0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U 0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U 0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.7	U 6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7	U 6.7	20		1
10138	Chrysene	218-01-9	0.37	U 0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U 0.75	1.9		1
10138	Diethylphthalate	84-66-2	6.7	U 6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U 6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J 6.7	20		1
10138	Fluoranthene	206-44-0	0.75	U 0.75	1.9		1
10138	Fluorene	86-73-7	0.75	U 0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U 0.75	1.9		1

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Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.75 U	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.75 U	0.75	1.9		1
10138	Naphthalene	91-20-3	0.75 U	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75 U	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7 U	6.7	20		1
10138	Phenanthrene	85-01-8	0.75 U	0.75	1.9		1
10138	Pyrene	129-00-0	0.75 U	0.75	1.9		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.1		23.67
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	84	U 84	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	56	U 56	170	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U 110	340	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U 110	340	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	56	U 56	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	56	U 56	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	56	U 56	170	10000000	1
10132	HMX	2691-41-0	140	U 140	420	10000000	1
10132	Nitrobenzene	98-95-3	56	U 56	170	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U 1,100	3,400	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U 110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U 140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U 110	170	10000000	1
10132	PETN	78-11-5	1,100	U 1,100	3,400	10000000	1
10132	RDX	121-82-4	70	U 70	170	10000000	1
10132	Tetryl	479-45-8	86	U 86	170	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	56	U 56	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	56	U 56	170	10000000	1

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Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics							
04173	17a Formaldehyde by	8315A	ug/kg	ug/kg	ug/kg	ug/kg	
		50-00-0	670 U	670	1,700		1
Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9		1
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.49 J	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37 U	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1
GC Extractable TPH							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.45 U	0.45	1.3		1
10199	EFH (C15-C20)	n.a.	1.1 J	0.45	1.3		1
10199	EFH (C21-C30)	n.a.	2.5	0.45	1.3		1
10199	EFH (C30 - C40)	n.a.	4.2	0.45	1.3		1
10199	EFH (C8-C11)	n.a.	0.45 U	0.45	1.3		1
GC Miscellaneous							
		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	560		1
10501	Isopropanol	67-63-0	110 U	110	560		1
10501	Methanol	67-56-1	240 J	110	560		1
GC Miscellaneous							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.6 U	5.6	14		1
08283	Ethylene glycol	107-21-1	5.6 U	5.6	14		1
08283	Propylene glycol	57-55-6	5.6 U	5.6	14		1
The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
Terphenyls							
		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	3.9		1
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	22,700	5.60	22.3		1
07914	Boron	7440-42-8	6.96	0.991	5.57		1

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Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01650	Calcium	7440-70-2	11,100	6.83	22.3		1
01654	Iron	7439-89-6	25,600	5.25	22.3		1
01656	Lithium	7439-93-2	21.9	0.25	2.2		1
01657	Magnesium	7439-95-4	6,390	2.83	11.1		1
06958	Manganese	7439-96-5	425	0.0869	0.557		1
10145	Phosphorus	7723-14-0	320	0.624	11.1		1
01662	Potassium	7440-09-7	2,370	20.0	55.7		1
01667	Sodium	7440-23-5	266	41.5	111		1
07968	Strontium	7440-24-6	29.2	0.0691	0.557		1
06969	Tin	7440-31-5	2.43 J	1.11	11.1		1
06970	Titanium	7440-32-6	1,280	0.423	1.11		1
10146	Zirconium	7440-67-7	5.01 J	0.936	5.57		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.137 J	0.0668	0.223		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.38	0.0668	0.445		2
06126	Barium	7440-39-3	142	0.120	0.445		2
06127	Beryllium	7440-41-7	0.864	0.0178	0.111		2
06128	Cadmium	7440-43-9	0.211	0.0401	0.111		2
06131	Chromium	7440-47-3	39.6	0.134	0.445		2
06132	Cobalt	7440-48-4	9.07	0.0223	0.111		2
06133	Copper	7440-50-8	15.0	0.0735	0.445		2
06135	Lead	7439-92-1	10.5	0.0116	0.223		2
06138	Molybdenum	7439-98-7	0.482	0.0557	0.111		2
06139	Nickel	7440-02-0	21.8	0.111	0.445		2
06141	Selenium	7782-49-2	0.115 J	0.0445	0.445		2
06142	Silver	7440-22-4	0.0298 J	0.0134	0.111		2
06145	Thallium	7440-28-0	0.374	0.0334	0.111		2
06148	Vanadium	7440-62-2	72.6	0.0245	0.111		2
06149	Zinc	7440-66-6	84.7	0.624	3.34		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.109		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	6.3	0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1 J	0.90	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.7		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.40 J	0.22	1.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05895	21a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.54	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	395	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	8.09	0.0100	0.0100	Std. Units	1
Wet Chemistry							
EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	11.1	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-026-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010 05:03	Laura M Krieger	1.04
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010 11:09	Jason M Long	21.04
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:47	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010 17:47	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011 14:28	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 21:22	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 14:03	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4513 SDG#: DE045-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/21/2010 00:23	Marie D John	23.67
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:47	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/04/2011 23:34	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 22:57	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 05:42	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 19:21	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 19:28	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 20:59	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 21:25	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4513 SDG#: DE045-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:42	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202B	01/11/2011 20:46	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202B	01/11/2011 20:46	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203B	01/11/2011 20:57	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 15:27	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201A	12/30/2010 18:51	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202B	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203B	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201A	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182103A	12/21/2010 17:40	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039403A	12/21/2010 17:40	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	12	6.5	7.8		0.89
06192	Benzene	71-43-2	0.1 U	0.1	3.9		0.89
06192	Bromobenzene	108-86-1	0.13 U	0.13	3.9		0.89
06192	Bromochloromethane	74-97-5	0.32 U	0.32	3.9		0.89
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	3.9		0.89
06192	Bromoform	75-25-2	0.39 U	0.39	3.9		0.89
06192	Bromomethane	74-83-9	0.24 U	0.24	3.9		0.89
06192	2-Butanone	78-93-3	1.2 U	1.2	7.8		0.89
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	3.9		0.89
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	3.9		0.89
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	3.9		0.89
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	3.9		0.89
06192	Chlorobenzene	108-90-7	0.11 U	0.11	3.9		0.89
06192	Chloroethane	75-00-3	0.13 U	0.13	3.9		0.89
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.29 U	0.29	3.9		0.89
06192	Chloroform	67-66-3	0.12 U	0.12	3.9		0.89
06192	Chloromethane	74-87-3	0.32 U	0.32	3.9		0.89
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	3.9		0.89
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	3.9		0.89
06192	Chlorotrifluoroethene	79-38-9	0.49 U	0.49	4.9		0.89
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.68 U	0.68	3.9		0.89
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	3.9		0.89
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	3.9		0.89
06192	Dibromomethane	74-95-3	0.23 U	0.23	3.9		0.89
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	3.9		0.89
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	3.9		0.89
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	3.9		0.89
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	3.9		0.89
06192	1,1-Dichloroethane	75-34-3	0.1 U	0.1	3.9		0.89
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	3.9		0.89
06192	1,1-Dichloroethene	75-35-4	0.38 U	0.38	3.9		0.89
06192	cis-1,2-Dichloroethene	156-59-2	0.19 U	0.19	3.9		0.89
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	3.9		0.89
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	3.9		0.89
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	3.9		0.89
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	3.9		0.89
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	3.9		0.89
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	3.9		0.89
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	3.9		0.89
06192	Ethylbenzene	100-41-4	0.06 U	0.06	3.9		0.89
06192	Freon 113	76-13-1	0.11 U	0.11	3.9		0.89
06192	Freon 133a	75-88-7	0.49 U	0.49	4.9		0.89
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	3.9		0.89
06192	2-Hexanone	591-78-6	1.6 U	1.6	7.8		0.89
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	3.9		0.89
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	3.9		0.89
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	3.9		0.89
06192	4-Methyl-2-pentanone	108-10-1	0.38 U	0.38	7.8		0.89
06192	Methylene Chloride	75-09-2	0.62 J	0.23	3.9		0.89
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	3.9		0.89

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.1 U	0.1	3.9		0.89
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	3.9		0.89
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22 U	0.22	3.9		0.89
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	3.9		0.89
06192	Toluene	108-88-3	0.08 J	0.08	3.9		0.89
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	3.9		0.89
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	3.9		0.89
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	3.9		0.89
06192	1,1,2-Trichloroethane	79-00-5	0.26 U	0.26	3.9		0.89
06192	Trichloroethene	79-01-6	0.15 U	0.15	3.9		0.89
06192	Trichlorofluoromethane	75-69-4	0.28 U	0.28	3.9		0.89
06192	1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	3.9		0.89
06192	1,2,4-Trimethylbenzene	95-63-6	0.39 U	0.39	3.9		0.89
06192	1,3,5-Trimethylbenzene	108-67-8	0.1 U	0.1	3.9		0.89
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	3.9		0.89
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	3.9		0.89
06192	o-Xylene	95-47-6	0.17 U	0.17	3.9		0.89
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.8 U	4.8	14		21.89
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	19.3 J	18.2	36.4		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200		1

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Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U 0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U 0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U 0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U 6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U 6.6	20		1
10138	Chrysene	218-01-9	0.36	U 0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U 6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U 6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9	J 6.6	20		1
10138	Fluoranthene	206-44-0	0.73	U 0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U 0.73	1.8		1

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Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6 U	6.6	20		1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1		21.93
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	82	U 82	160	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	55	U 55	160	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U 110	330	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U 110	330	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	55	U 55	160	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	55	U 55	160	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	55	U 55	160	1000000 0	1
10132	HMX	2691-41-0	140	U 140	410	1000000 0	1
10132	Nitrobenzene	98-95-3	55	U 55	160	1000000 0	1
10132	Nitroglycerin	55-63-0	1,100	U 1,100	3,300	1000000 0	1
10132	2-Nitrotoluene	88-72-2	110	U 110	160	1000000 0	1
10132	3-Nitrotoluene	99-08-1	140	U 140	160	1000000 0	1
10132	4-Nitrotoluene	99-99-0	110	U 110	160	1000000 0	1
10132	PETN	78-11-5	1,100	U 1,100	3,300	1000000 0	1
10132	RDX	121-82-4	68	U 68	160	1000000 0	1
10132	Tetryl	479-45-8	84	U 84	160	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	55	U 55	160	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	55	U 55	160	1000000 0	1

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SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
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E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics								
04173	17a Formaldehyde by	8315A	50-00-0	660	U	660	1,600	1
Pesticides/PCBs								
		SW-846 8082	ug/kg			ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9		1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9		1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.36	U	0.36	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
GC Extractable TPH								
		SW-846 8015B modified	mg/kg			mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	1.2	J	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	1.1	J	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44	U	0.44	1.3		1
GC Miscellaneous								
		SW-846 8015B	ug/kg			ug/kg	ug/kg	
10501	Ethanol	64-17-5	110	U	110	550		1
10501	Isopropanol	67-63-0	110	U	110	550		1
10501	Methanol	67-56-1	220	J	110	550		1
GC Miscellaneous								
		SW-846 8015B modified	mg/kg			mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.5	U	5.5	14		1
08283	Ethylene glycol	107-21-1	6.6	U	6.6	14		1
08283	Propylene glycol	57-55-6	8.7	U	8.7	14		1
The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.								
Reporting limits were raised due to interference from the sample matrix.								
Terphenyls								
		SW-846 8015B	mg/kg			mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.8		1
Metals								
		SW-846 6010B	mg/kg			mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,900		5.33	21.2		1

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Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
07914	Boron	7440-42-8	4.31 J	0.943	5.30		1
01650	Calcium	7440-70-2	2,330	6.50	21.2		1
01654	Iron	7439-89-6	20,300	4.99	21.2		1
01656	Lithium	7439-93-2	21.5	0.23	2.1		1
01657	Magnesium	7439-95-4	4,250	2.69	10.6		1
06958	Manganese	7439-96-5	268	0.0827	0.530		1
10145	Phosphorus	7723-14-0	157	0.594	10.6		1
01662	Potassium	7440-09-7	1,870	19.1	53.0		1
01667	Sodium	7440-23-5	240	39.5	106		1
07968	Strontium	7440-24-6	20.6	0.0657	0.530		1
06969	Tin	7440-31-5	2.36 J	1.06	10.6		1
06970	Titanium	7440-32-6	1,110	0.403	1.06		1
10146	Zirconium	7440-67-7	2.87 J	0.890	5.30		1
SW-846 6020							
			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0835 J	0.0636	0.212		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.37	0.0636	0.424		2
06126	Barium	7440-39-3	103	0.114	0.424		2
06127	Beryllium	7440-41-7	0.808	0.0170	0.106		2
06128	Cadmium	7440-43-9	0.0665 J	0.0382	0.106		2
06131	Chromium	7440-47-3	27.9	0.127	0.424		2
06132	Cobalt	7440-48-4	6.61	0.0212	0.106		2
06133	Copper	7440-50-8	10.8	0.0700	0.424		2
06135	Lead	7439-92-1	8.34	0.0110	0.212		2
06138	Molybdenum	7439-98-7	0.407	0.0530	0.106		2
06139	Nickel	7440-02-0	14.6	0.106	0.424		2
06141	Selenium	7782-49-2	0.0900 J	0.0424	0.424		2
06142	Silver	7440-22-4	0.0313 J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.302	0.0318	0.106		2
06148	Vanadium	7440-62-2	49.0	0.0233	0.106		2
06149	Zinc	7440-66-6	64.4	0.594	3.18		2
SW-846 7471A							
			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.107		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.2	0.87	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	3.5	0.87	1.6		1
EPA 314.0							
			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.8		1
SW-846 7199							
			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32 J	0.22	1.1		1

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SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

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Submitted: 12/18/2010 12:40

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E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05895	21a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.53	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	480	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	7.78	0.0100	0.0100	Std. Units	1
Wet Chemistry							
EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	8.4	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-026-SA5B-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010 05:26	Laura M Krieger	0.89
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010 11:29	Jason M Long	21.89
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:50	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010 17:52	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011 14:45	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 21:57	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 14:35	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1

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Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/21/2010 00:59	Marie D John	21.93
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:50	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/05/2011 00:16	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 23:07	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 06:01	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 15:37	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 19:42	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 23:39	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 22:10	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:59	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4514 SDG#: DE045-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:59	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:59	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:44	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202B	01/11/2011 21:28	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202B	01/11/2011 21:28	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203B	01/11/2011 22:29	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 15:39	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201B	12/30/2010 18:55	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202B	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203B	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201B	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182103A	12/21/2010 17:40	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039403A	12/21/2010 17:40	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: TB-121710 Water
SSFL Area IV Collocated Soil Sampling
TB-121710

LLI Sample # WW 6169030
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4515 SDG#: DE045-15TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6 U	6	20		1
10904	Benzene	71-43-2	0.5 U	0.5	5		1
10904	Bromobenzene	108-86-1	1 U	1	5		1
10904	Bromochloromethane	74-97-5	1 U	1	5		1
10904	Bromodichloromethane	75-27-4	1 U	1	5		1
10904	Bromoform	75-25-2	1 U	1	5		1
10904	Bromomethane	74-83-9	1 U	1	5		1
10904	2-Butanone	78-93-3	3 U	3	10		1
10904	n-Butylbenzene	104-51-8	1 U	1	5		1
10904	sec-Butylbenzene	135-98-8	1 U	1	5		1
10904	tert-Butylbenzene	98-06-6	1 U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1 U	1	5		1
10904	Chlorobenzene	108-90-7	0.8 U	0.8	5		1
10904	Chloroethane	75-00-3	1 U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2 U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10904	Chloroform	67-66-3	0.8 U	0.8	5		1
10904	Chloromethane	74-87-3	1 U	1	5		1
10904	2-Chlorotoluene	95-49-8	1 U	1	5		1
10904	4-Chlorotoluene	106-43-4	1 U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2 U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2 U	2	5		1
10904	Dibromochloromethane	124-48-1	1 U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1 U	1	5		1
10904	Dibromomethane	74-95-3	1 U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2 U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1 U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1 U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8 U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8 U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8 U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1 U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1 U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1 U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1 U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1 U	1	5		1
10904	Ethylbenzene	100-41-4	0.8 U	0.8	5		1
10904	Freon 113	76-13-1	2 U	2	10		1
10904	Freon 133a	75-88-7	2 U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2 U	2	5		1
10904	2-Hexanone	591-78-6	3 U	3	10		1
10904	Isopropylbenzene	98-82-8	1 U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1 U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3 U	3	10		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: TB-121710 Water
SSFL Area IV Collocated Soil Sampling
TB-121710

LLI Sample # WW 6169030
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 01/27/2011 12:46

E4515 SDG#: DE045-15TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2 U	2	5		1
10904	n-Propylbenzene	103-65-1	1 U	1	5		1
10904	Styrene	100-42-5	1 U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8 U	0.8	5		1
10904	Toluene	108-88-3	0.7 U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1 U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8 U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8 U	0.8	5		1
10904	Trichloroethene	79-01-6	1 U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2 U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1 U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5		1
10904	Vinyl Chloride	75-01-4	1 U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8 U	0.8	5		1
10904	o-Xylene	95-47-6	0.8 U	0.8	5		1
GC/MS	Volatiles	SW-846 8260B SIM	ug/l	ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5 U	0.5	2.0		1
GC	Volatiles	TPH GRO SW-8015B	ug/l	ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y103572AA	12/23/2010 16:14	Sara E Johnson	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103541AA	12/20/2010 11:40	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103541AA	12/20/2010 11:40	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y103572AA	12/23/2010 16:14	Sara E Johnson	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	10355B20A	12/22/2010 11:52	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	10355B20A	12/22/2010 11:52	Carrie E Miller	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B103543AA Sample number(s): 6169024-6169029									
Acetone	6.7 U	6.7	8.0	ug/kg	130	124	32-209	4	30
Benzene	0.10 U	0.10	4.0	ug/kg	106	105	80-120	1	30
Bromobenzene	0.13 U	0.13	4.0	ug/kg	94	93	79-120	1	30
Bromochloromethane	0.33 U	0.33	4.0	ug/kg	98	95	79-124	3	30
Bromodichloromethane	0.08 U	0.08	4.0	ug/kg	98	96	78-120	1	30
Bromoform	0.40 U	0.40	4.0	ug/kg	95	92	70-120	3	30
Bromomethane	0.25 U	0.25	4.0	ug/kg	78	79	32-162	1	30
2-Butanone	1.2 U	1.2	8.0	ug/kg	114	108	46-153	5	30
n-Butylbenzene	0.12 U	0.12	4.0	ug/kg	100	99	72-120	1	30
sec-Butylbenzene	0.06 U	0.06	4.0	ug/kg	100	99	75-120	0	30
tert-Butylbenzene	0.16 U	0.16	4.0	ug/kg	94	94	75-120	1	30
Carbon Tetrachloride	0.14 U	0.14	4.0	ug/kg	104	103	69-122	1	30
Chlorobenzene	0.11 U	0.11	4.0	ug/kg	99	98	80-120	0	30
Chloroethane	0.13 U	0.13	4.0	ug/kg	82	81	37-154	1	30
2-Chloroethyl Vinyl Ether	0.30 U	0.30	4.0	ug/kg	101	101	43-146	1	30
Chloroform	0.12 U	0.12	4.0	ug/kg	103	102	80-120	1	30
Chloromethane	0.33 U	0.33	4.0	ug/kg	90	92	54-132	2	30
2-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	97	96	78-120	2	30
4-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	98	97	79-120	1	30
Chlorotrifluoroethene	0.50 U	0.50	5.0	ug/kg	56	56	22-131	1	30
1,2-Dibromo-3-chloropropane	0.70 U	0.70	4.0	ug/kg	92	89	58-120	3	30
Dibromochloromethane	0.20 U	0.20	4.0	ug/kg	97	95	77-120	2	30
1,2-Dibromoethane	0.17 U	0.17	4.0	ug/kg	98	96	80-120	2	30
Dibromomethane	0.24 U	0.24	4.0	ug/kg	101	99	80-120	3	30
1,2-Dichlorobenzene	0.09 U	0.09	4.0	ug/kg	97	97	79-120	1	30
1,3-Dichlorobenzene	0.12 U	0.12	4.0	ug/kg	94	94	78-120	0	30
1,4-Dichlorobenzene	0.16 U	0.16	4.0	ug/kg	96	95	79-120	1	30
Dichlorodifluoromethane	0.12 U	0.12	4.0	ug/kg	82	80	20-120	3	30
1,1-Dichloroethane	0.10 U	0.10	4.0	ug/kg	105	104	80-120	1	30
1,2-Dichloroethane	0.15 U	0.15	4.0	ug/kg	102	100	71-129	2	30
1,1-Dichloroethene	0.39 U	0.39	4.0	ug/kg	107	104	73-123	3	30
cis-1,2-Dichloroethene	0.19 U	0.19	4.0	ug/kg	104	103	80-120	1	30
trans-1,2-Dichloroethene	0.12 U	0.12	4.0	ug/kg	104	103	79-120	0	30
1,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	102	101	80-120	1	30
1,3-Dichloropropane	0.08 U	0.08	4.0	ug/kg	100	97	80-120	3	30
2,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	101	101	72-123	0	30
1,1-Dichloropropene	0.13 U	0.13	4.0	ug/kg	104	103	77-120	0	30
cis-1,3-Dichloropropene	0.16 U	0.16	4.0	ug/kg	92	93	80-120	0	30
trans-1,3-Dichloropropene	0.17 U	0.17	4.0	ug/kg	91	91	77-120	0	30
Ethylbenzene	0.06 U	0.06	4.0	ug/kg	101	101	80-120	1	30
Freon 113	0.11 U	0.11	4.0	ug/kg	107	104	61-126	2	30
Freon 133a	0.50 U	0.50	5.0	ug/kg	81	81	78-120	1	30
Hexachlorobutadiene	0.14 U	0.14	4.0	ug/kg	91	91	57-120	0	30
2-Hexanone	1.6 U	1.6	8.0	ug/kg	79	77	45-155	2	30
Isopropylbenzene	0.06 U	0.06	4.0	ug/kg	100	99	76-120	0	30
p-Isopropyltoluene	0.11 U	0.11	4.0	ug/kg	99	99	75-120	0	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21 U	0.21	4.0	ug/kg	96	96	74-121	1	30
4-Methyl-2-pentanone	0.39 U	0.39	8.0	ug/kg	79	76	61-134	3	30
Methylene Chloride	0.50 J	0.24	4.0	ug/kg	98	97	76-124	1	30
n-Propylbenzene	0.07 U	0.07	4.0	ug/kg	102	102	77-120	0	30
Styrene	0.10 U	0.10	4.0	ug/kg	98	98	76-120	0	30
1,1,1,2-Tetrachloroethane	0.11 U	0.11	4.0	ug/kg	99	98	80-120	1	30
1,1,2,2-Tetrachloroethane	0.23 U	0.23	4.0	ug/kg	97	94	71-123	3	30
Tetrachloroethene	0.20 U	0.20	4.0	ug/kg	104	103	77-120	1	30
Toluene	0.11 J	0.08	4.0	ug/kg	101	101	80-120	1	30
1,2,3-Trichlorobenzene	0.14 U	0.14	4.0	ug/kg	92	92	64-120	0	30
1,2,4-Trichlorobenzene	0.18 U	0.18	4.0	ug/kg	90	91	68-120	1	30
1,1,1-Trichloroethane	0.20 U	0.20	4.0	ug/kg	101	100	71-125	1	30
1,1,2-Trichloroethane	0.27 U	0.27	4.0	ug/kg	98	96	80-120	2	30
Trichloroethene	0.15 U	0.15	4.0	ug/kg	102	102	80-120	0	30
Trichlorofluoromethane	0.29 U	0.29	4.0	ug/kg	91	88	58-133	3	30
1,2,3-Trichloropropane	0.33 U	0.33	4.0	ug/kg	96	95	71-123	1	30
1,2,4-Trimethylbenzene	0.40 U	0.40	4.0	ug/kg	99	100	79-120	1	30
1,3,5-Trimethylbenzene	0.10 U	0.10	4.0	ug/kg	100	99	78-120	1	30
Vinyl Chloride	0.20 U	0.20	4.0	ug/kg	89	89	53-120	0	30
m+p-Xylene	0.17 U	0.17	4.0	ug/kg	102	101	80-120	0	30
o-Xylene	0.17 U	0.17	4.0	ug/kg	97	97	80-120	0	30
Batch number: E103541AA	Sample number(s): 6169030								
1,4-Dioxane	0.5 U	0.5	2.0	ug/l	105	106	60-132	1	30
Batch number: E103571AA	Sample number(s): 6169024-6169029								
1,4-Dioxane	5.0 U	5.0	15	ug/kg	101	98	70-130	3	30
Batch number: Y103572AA	Sample number(s): 6169030								
Acetone	6 U	6.	20	ug/l	213	204	49-234	4	30
Benzene	0.5 U	0.5	5	ug/l	95	94	79-120	1	30
Bromobenzene	1 U	1.	5	ug/l	101	99	80-120	2	30
Bromochloromethane	1 U	1.	5	ug/l	98	95	80-120	3	30
Bromodichloromethane	1 U	1.	5	ug/l	100	99	80-120	2	30
Bromoform	1 U	1.	5	ug/l	103	102	61-120	1	30
Bromomethane	1 U	1.	5	ug/l	79	80	44-120	1	30
2-Butanone	3 U	3.	10	ug/l	157*	152*	66-151	3	30
n-Butylbenzene	1 U	1.	5	ug/l	91	90	74-120	1	30
sec-Butylbenzene	1 U	1.	5	ug/l	99	98	78-120	1	30
tert-Butylbenzene	1 U	1.	5	ug/l	94	90	80-120	4	30
Carbon Tetrachloride	1 U	1.	5	ug/l	113	113	75-123	0	30
Chlorobenzene	0.8 U	0.8	5	ug/l	94	94	80-120	0	30
Chloroethane	1 U	1.	5	ug/l	85	85	49-129	0	30
2-Chloroethyl Vinyl Ether	2 U	2.	10	ug/l	112	111	56-129	1	30
Chloroform	0.8 U	0.8	5	ug/l	103	101	77-122	2	30
Chloromethane	1 U	1.	5	ug/l	81	82	60-129	0	30
2-Chlorotoluene	1 U	1.	5	ug/l	99	97	80-120	3	30
4-Chlorotoluene	1 U	1.	5	ug/l	94	92	80-120	3	30
Chlorotrifluoroethene	2 U	2.	5	ug/l	97	92	38-136	5	30
1,2-Dibromo-3-chloropropane	2 U	2.	5	ug/l	124*	119	66-120	4	30
Dibromochloromethane	1 U	1.	5	ug/l	104	104	80-120	0	30
1,2-Dibromoethane	1 U	1.	5	ug/l	100	99	80-120	1	30
Dibromomethane	1 U	1.	5	ug/l	97	97	80-120	0	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	93	91	80-120	1	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	98	95	80-120	3	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	95	93	80-120	3	30
Dichlorodifluoromethane	2 U	2.	5	ug/l	64	64	47-120	1	30
1,1-Dichloroethane	1 U	1.	5	ug/l	105	105	79-120	0	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1 U	1.	5	ug/l	112	112	70-130	0	30
1,1-Dichloroethene	0.8 U	0.8	5	ug/l	88	86	74-123	2	30
cis-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	95	95	80-120	1	30
trans-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	95	94	80-120	1	30
1,2-Dichloropropane	1 U	1.	5	ug/l	96	96	78-120	1	30
1,3-Dichloropropane	1 U	1.	5	ug/l	103	102	80-120	1	30
2,2-Dichloropropane	1 U	1.	5	ug/l	101	102	77-124	1	30
1,1-Dichloropropene	1 U	1.	5	ug/l	101	101	80-120	0	30
cis-1,3-Dichloropropene	1 U	1.	5	ug/l	96	94	80-120	2	30
trans-1,3-Dichloropropene	1 U	1.	5	ug/l	104	103	79-120	1	30
Ethylbenzene	0.8 U	0.8	5	ug/l	99	98	79-120	0	30
Freon 113	2 U	2.	10	ug/l	93	91	69-128	2	30
Freon 133a	2 U	2.	5	ug/l	89	88	77-120	1	30
Hexachlorobutadiene	2 U	2.	5	ug/l	86	89	58-120	4	30
2-Hexanone	3 U	3.	10	ug/l	146*	143*	65-136	2	30
Isopropylbenzene	1 U	1.	5	ug/l	97	96	77-120	1	30
p-Isopropyltoluene	1 U	1.	5	ug/l	97	96	80-120	1	30
Methyl Tertiary Butyl Ether	0.5 U	0.5	5	ug/l	102	103	76-120	0	30
4-Methyl-2-pentanone	3 U	3.	10	ug/l	117	116	70-121	1	30
Methylene Chloride	2 U	2.	5	ug/l	88	86	80-120	2	30
n-Propylbenzene	1 U	1.	5	ug/l	104	102	80-120	2	30
Styrene	1 U	1.	5	ug/l	95	93	80-120	2	30
1,1,1,2-Tetrachloroethane	1 U	1.	5	ug/l	105	105	80-120	0	30
1,1,2,2-Tetrachloroethane	1 U	1.	5	ug/l	106	104	71-120	2	30
Tetrachloroethene	0.8 U	0.8	5	ug/l	97	97	80-121	0	30
Toluene	0.7 U	0.7	5	ug/l	96	95	79-120	1	30
1,2,3-Trichlorobenzene	1 U	1.	5	ug/l	90	90	65-120	1	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	91	88	67-120	3	30
1,1,1-Trichloroethane	0.8 U	0.8	5	ug/l	95	95	75-127	0	30
1,1,2-Trichloroethane	0.8 U	0.8	5	ug/l	99	98	80-120	1	30
Trichloroethene	1 U	1.	5	ug/l	95	93	80-120	1	30
Trichlorofluoromethane	2 U	2.	5	ug/l	85	83	64-129	2	30
1,2,3-Trichloropropane	1 U	1.	5	ug/l	112	110	80-120	1	30
1,2,4-Trimethylbenzene	1 U	1.	5	ug/l	103	100	74-120	4	30
1,3,5-Trimethylbenzene	1 U	1.	5	ug/l	100	98	75-120	2	30
Vinyl Chloride	1 U	1.	5	ug/l	75	74	65-125	2	30
m+p-Xylene	0.8 U	0.8	5	ug/l	91	91	80-120	0	30
o-Xylene	0.8 U	0.8	5	ug/l	92	92	80-120	0	30

Batch number: 10354WAI026

Sample number(s): 6169017-6169018

Acenaphthene	0.010 U	0.010	0.050	ug/l	75	75	74-109	0	30
Acenaphthylene	0.010 U	0.010	0.050	ug/l	77	78	70-110	2	30
Anthracene	0.010 U	0.010	0.050	ug/l	76	77	66-111	1	30
Benzo(a)anthracene	0.010 U	0.010	0.050	ug/l	79	80	72-114	1	30
Benzo(a)pyrene	0.010 U	0.010	0.050	ug/l	74	75	64-115	2	30
Benzo(b)fluoranthene	0.010 U	0.010	0.050	ug/l	81	83	69-123	2	30
Benzo(g,h,i)perylene	0.010 U	0.010	0.050	ug/l	62*	68	68-125	10	30
Benzo(k)fluoranthene	0.010 U	0.010	0.050	ug/l	79	81	72-122	2	30
Butylbenzylphthalate	0.099 J	0.050	1.0	ug/l	83	86	70-130	4	30
Di-n-butylphthalate	0.16 J	0.050	1.0	ug/l	92	93	70-130	1	30
Chrysene	0.010 U	0.010	0.050	ug/l	76	78	76-116	3	30
Dibenz(a,h)anthracene	0.010 U	0.010	0.050	ug/l	60*	65*	71-125	8	30
Diethylphthalate	0.050 U	0.050	1.0	ug/l	92	96	70-130	4	30
Dimethylphthalate	0.050 U	0.050	1.0	ug/l	80	85	70-130	6	30
Bis(2-Ethylhexyl)phthalate	0.19 J	0.050	1.0	ug/l	80	80	70-130	0	30
Fluoranthene	0.010 U	0.010	0.050	ug/l	77	80	75-116	4	30
Fluorene	0.010 U	0.010	0.050	ug/l	80	81	75-114	2	30
Indeno(1,2,3-cd)pyrene	0.010 U	0.010	0.050	ug/l	60*	66*	69-124	10	30

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
1-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	79	78	71-117	2	30
2-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	69*	67*	75-115	2	30
Naphthalene	0.010 U	0.010	0.050	ug/l	72	71*	72-109	2	30
N-Nitrosodimethylamine	0.010 U	0.010	0.050	ug/l	54*	53*	70-130	1	30
Di-n-octylphthalate	0.18 J	0.050	1.0	ug/l	79	79	70-130	1	30
Phenanthrene	0.010 U	0.010	0.050	ug/l	72*	73*	76-111	2	30
Pyrene	0.010 U	0.010	0.050	ug/l	80	83	69-118	4	30

Batch number: 10354WAM026

Sample number(s): 6169017-6169018

Aniline	1	U	1.	5	ug/l	61	90	49-101	39*	30
Benidine	20	U	20.	60	ug/l	52	80	20-109	44*	30
Benzoic acid	6	U	6.	15	ug/l	16	32	10-69	67*	30
Benzyl alcohol	5	U	5.	15	ug/l	81	95	66-97	16	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	93	99	82-117	5	30
Carbazole	1	U	1.	5	ug/l	96	102	81-114	7	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	91	100	70-123	9	30
4-Chloroaniline	1	U	1.	5	ug/l	55	83	42-124	40*	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	90	97	74-124	8	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	89	96	77-108	7	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	90	96	62-127	6	30
2-Chloronaphthalene	2	U	2.	5	ug/l	74	78	54-132	6	30
2-Chlorophenol	1	U	1.	5	ug/l	89	101	77-108	12	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	91	96	82-111	6	30
Dibenzofuran	1	U	1.	5	ug/l	93	99	83-108	6	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	68	72	67-108	6	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	62*	67	63-110	9	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	64*	68	65-113	5	30
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	63	82	49-111	26	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	91	99	80-109	9	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	89	97	72-110	8	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	94	104	70-130	10	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	83	92	78-119	11	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	72	89	64-120	21	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	93	99	81-115	7	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	95	102	85-115	7	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	96	103	78-116	6	30
Hexachlorobenzene	1	U	1.	5	ug/l	93	98	81-118	6	30
Hexachlorobutadiene	1	U	1.	5	ug/l	58	61	57-124	6	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	30	45	10-118	40*	30
Hexachloroethane	1	U	1.	5	ug/l	53	58	52-113	9	30
Isophorone	1	U	1.	5	ug/l	92	98	74-117	7	30
2-Methylphenol	1	U	1.	5	ug/l	85	94	64-101	10	30
4-Methylphenol	2	U	2.	5	ug/l	76	91	61-103	18	30
2-Nitroaniline	1	U	1.	5	ug/l	94	103	83-116	9	30
3-Nitroaniline	1	U	1.	5	ug/l	92	104	74-113	12	30
4-Nitroaniline	1	U	1.	5	ug/l	78	87	59-100	11	30
Nitrobenzene	1	U	1.	5	ug/l	91	96	75-109	5	30
2-Nitrophenol	1	U	1.	5	ug/l	87	98	86-120	12	30
4-Nitrophenol	10	U	10.	30	ug/l	41	48	16-78	15	30
N-Nitroso-di-n-propylamine	1	U	1.	5	ug/l	90	97	69-110	8	30
N-Nitrosodiphenylamine	2	U	2.	5	ug/l	92	98	67-136	7	30
Pentachlorophenol	3	U	3.	15	ug/l	90	97	53-110	7	30
Phenol	1	U	1.	5	ug/l	43	52	29-67	19	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	71	73	71-112	3	30
2,4,5-Trichlorophenol	1	U	1.	5	ug/l	90	102	79-107	13	30
2,4,6-Trichlorophenol	1	U	1.	5	ug/l	91	98	81-113	8	30

Batch number: 10362SLF026

Sample number(s): 6169016,6169019-6169029

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Aniline	170 U	170.	500	ug/kg	37		10-107		
Benzidine	1,200 U	1,200.	3,300	ug/kg	34		15-121		
Benzoic acid	170 U	170.	500	ug/kg	92		10-154		
Benzyl alcohol	170 U	170.	500	ug/kg	86		68-111		
4-Bromophenyl-phenylether	17	U 17.	170	ug/kg	90		79-117		
Carbazole	17	U 17.	170	ug/kg	94		77-113		
4-Chloro-3-methylphenol	33	U 33.	170	ug/kg	92		74-119		
4-Chloroaniline	67	U 67.	170	ug/kg	37		10-110		
bis(2-Chloroethoxy)methane	17	U 17.	170	ug/kg	95		70-118		
bis(2-Chloroethyl)ether	17	U 17.	170	ug/kg	86		70-104		
bis(2-Chloroisopropyl)ether	17	U 17.	170	ug/kg	86		68-131		
2-Chloronaphthalene	17	U 17.	170	ug/kg	77		67-127		
2-Chlorophenol	17	U 17.	170	ug/kg	91		72-112		
4-Chlorophenyl-phenylether	33	U 33.	170	ug/kg	93		79-110		
Dibenzofuran	17	U 17.	170	ug/kg	92		79-108		
1,2-Dichlorobenzene	17	U 17.	170	ug/kg	89		79-102		
1,3-Dichlorobenzene	17	U 17.	170	ug/kg	86		70-98		
1,4-Dichlorobenzene	17	U 17.	170	ug/kg	87		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	39		38-105		
2,4-Dichlorophenol	17	U 17.	170	ug/kg	94		75-111		
2,4-Dimethylphenol	33	U 33.	170	ug/kg	95		72-111		
3,5-Dimethylphenol	33	U 33.	170	ug/kg	105		70-130		
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	80		53-110		
2,4-Dinitrophenol	670 U	670.	2,000	ug/kg	77		37-120		
2,4-Dinitrotoluene	33	U 33.	170	ug/kg	95		73-115		
2,6-Dinitrotoluene	17	U 17.	170	ug/kg	97		79-115		
1,2-Diphenylhydrazine	17	U 17.	170	ug/kg	99		77-111		
Hexachlorobenzene	17	U 17.	170	ug/kg	93		78-116		
Hexachlorobutadiene	67	U 67.	170	ug/kg	97		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	106		46-115		
Hexachloroethane	17	U 17.	170	ug/kg	91		68-105		
Isophorone	17	U 17.	170	ug/kg	92		69-110		
2-Methylphenol	33	U 33.	170	ug/kg	87		66-110		
4-Methylphenol	33	U 33.	170	ug/kg	88		66-117		
2-Nitroaniline	17	U 17.	170	ug/kg	100		78-116		
3-Nitroaniline	33	U 33.	170	ug/kg	82		62-109		
4-Nitroaniline	67	U 67.	170	ug/kg	61		49-98		
Nitrobenzene	17	U 17.	170	ug/kg	96		71-104		
2-Nitrophenol	17	U 17.	170	ug/kg	94		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	96		56-118		
N-Nitroso-di-n-propylamine	17	U 17.	170	ug/kg	86		63-107		
N-Nitrosodiphenylamine	17	U 17.	170	ug/kg	94		67-141		
Pentachlorophenol	170 U	170.	500	ug/kg	80		35-106		
Phenol	17	U 17.	170	ug/kg	90		58-112		
1,2,4-Trichlorobenzene	17	U 17.	170	ug/kg	94		73-108		
2,4,5-Trichlorophenol	33	U 33.	170	ug/kg	97		76-107		
2,4,6-Trichlorophenol	33	U 33.	170	ug/kg	101		78-111		

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10362SLK026	Sample number(s): 6169016, 6169019-6169029								
Acenaphthene	0.67 U	0.67	1.7	ug/kg	93		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	95		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	101		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	100		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	95		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	98		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	99		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	101		66-137		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	111		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	112		84-132		
Chrysene	0.33 U	0.33	1.7	ug/kg	93		79-120		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	99		62-142		
Diethylphthalate	6.0 U	6.0	18	ug/kg	102		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	103		70-130		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	110		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	99		78-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	98		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	100		62-141		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	92		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	83		62-120		
Naphthalene	0.67 U	0.67	1.7	ug/kg	91		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	94		39-148		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	112		55-176		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	93		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	96		56-121		
Batch number: 10363SLG026	Sample number(s): 6169024-6169029								
N-Nitrosodimethylamine	16.7 U	16.7	33.3	ng/kg	93		70-130		
Batch number: 10354A34A	Sample number(s): 6169024-6169029								
9a TPH by EPA 8015B Gas C5-C12	0.2 U	0.2	1.0	mg/kg	74	79	67-119	6	30
Batch number: 10355B20A	Sample number(s): 6169030								
TPH-GRO S.CA water C5-C12	20 U	20.	50	ug/l	109	109	75-135	0	30
Batch number: 103630002A	Sample number(s): 6169024-6169029								
4-Amino-2,6-Dinitrotoluene	75 U	75.	150	ug/kg	114		80-120		
2-Amino-4,6-Dinitrotoluene	50 U	50.	150	ug/kg	114		80-120		
2,6-Diamino-4-nitrotoluene	100 U	100.	300	ug/kg	95	101	54-134	6	30
2,4-Diamino-6-nitrotoluene	100 U	100.	300	ug/kg	94	100	54-134	6	30
1,3-Dinitrobenzene	50 U	50.	150	ug/kg	111		51-171		
2,4-Dinitrotoluene	50 U	50.	150	ug/kg	108		72-135		
2,6-Dinitrotoluene	50 U	50.	150	ug/kg	116		80-120		
HMX	130 U	130.	380	ug/kg	102		74-130		
Nitrobenzene	50 U	50.	150	ug/kg	110		80-120		
Nitroglycerin	1,000 U	1,000.	3,000	ug/kg	99		80-120		
2-Nitrotoluene	100 U	100.	150	ug/kg	114		78-128		
3-Nitrotoluene	130 U	130.	150	ug/kg	114		73-127		
4-Nitrotoluene	100 U	100.	150	ug/kg	113		80-120		
PETN	1,000 U	1,000.	3,000	ug/kg	113		80-120		

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
RDX	63 U	63.	150	ug/kg	111		75-131		
Tetryl	77 U	77.	150	ug/kg	134		70-168		
1,3,5-Trinitrobenzene	50 U	50.	150	ug/kg	127		77-137		
2,4,6-Trinitrotoluene	50 U	50.	150	ug/kg	115		80-120		
Batch number: 103560015A	Sample number(s): 6169024-6169029								
17a Formaldehyde by 8315A	600 U	600.	1,500	ug/kg	96		80-126		
Batch number: 103560021A	Sample number(s): 6169017-6169018								
2,4-D	0.16 U	0.16	0.50	ug/l	140*	148*	45-128	6	30
Dalapon	0.25 U	0.25	1.3	ug/l	98	100	40-100	2	30
2,4-DB	0.30 U	0.30	1.0	ug/l	108	112	41-138	4	30
Dicamba	0.080 U	0.080	0.30	ug/l	108	112	51-144	4	30
Dinoseb	0.10 U	0.10	0.50	ug/l	60	67	23-93	11	30
2,4-DP (Dichlorprop)	0.16 U	0.16	0.50	ug/l	160*	168*	72-145	5	30
MCPA	300 U	300.	1,000	ug/l	116	124	69-129	7	30
MCPP	50 U	50.	200	ug/l	96	104	66-132	8	30
2,4,5-T	0.015 U	0.015	0.050	ug/l	112	112	53-141	0	30
2,4,5-TP	0.010 U	0.010	0.050	ug/l	108	116	56-135	7	30
Batch number: 103620013A	Sample number(s): 6169016,6169019-6169023								
2,4-D	1.2 U	1.2	3.6	ug/kg	109		40-140		
Dalapon	4.4 U	4.4	9.0	ug/kg	30		24-89		
2,4-DB	0.62 U	0.62	1.7	ug/kg	99		34-138		
Dicamba	0.40 U	0.40	1.2	ug/kg	88		20-164		
Dinoseb	0.80 U	0.80	2.4	ug/kg	6*		10-36		
2,4-DP (Dichlorprop)	0.80 U	0.80	1.7	ug/kg	118		60-141		
MCPA	76 U	76.	250	ug/kg	89		34-113		
MCPP (Mecoprop)	75 U	75.	250	ug/kg	87		29-154		
2,4,5-T	0.082 U	0.082	0.17	ug/kg	107		33-145		
2,4,5-TP	0.075 U	0.075	0.17	ug/kg	90		48-138		
Batch number: 103550011A	Sample number(s): 6169017-6169018								
Aldrin	0.0020 U	0.0020	0.010	ug/l	101	101	54-159	0	30
Alpha BHC	0.0030 U	0.0030	0.010	ug/l	122	122	59-146	0	30
Beta BHC	0.0029 U	0.0029	0.010	ug/l	98	103	73-147	5	30
Gamma BHC - Lindane	0.0020 U	0.0020	0.010	ug/l	89	96	68-128	8	30
Chlordane	0.12 U	0.12	0.50	ug/l					
p,p-DDD	0.0050 U	0.0050	0.020	ug/l	90	105	71-139	15	30
p,p-DDE	0.0050 U	0.0050	0.020	ug/l	105	116	66-130	10	30
p,p-DDT	0.0050 U	0.0050	0.020	ug/l	100	85	53-126	16	30
Delta BHC	0.0029 U	0.0029	0.010	ug/l	97	103	76-148	6	30
Dieldrin	0.0053 U	0.0053	0.020	ug/l	100	105	76-132	5	30
Endosulfan I	0.0043 U	0.0043	0.010	ug/l	79	89	68-128	12	30
Endosulfan II	0.015 U	0.015	0.020	ug/l	85	95	59-144	11	30
Endosulfan Sulfate	0.0058 U	0.0058	0.020	ug/l	85	105	71-142	21	30
Endrin	0.0081 U	0.0081	0.020	ug/l	75	90	52-132	18	30
Endrin Aldehyde	0.020 U	0.020	0.10	ug/l	95	105	68-139	10	20
Endrin Ketone	0.0050 U	0.0050	0.020	ug/l	95	105	69-146	10	30
Heptachlor	0.0026 U	0.0026	0.010	ug/l	92	97	57-126	5	30
Heptachlor Epoxide	0.0023 U	0.0023	0.010	ug/l	95	102	73-156	7	30
Methoxychlor	0.030 U	0.030	0.10	ug/l	75	91	52-133	19	30
Mirex	0.085 U	0.085	0.25	ug/l					
Toxaphene	1.0 U	1.0	3.0	ug/l					

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Reported: 01/27/11 at 12:40 PM										
Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max	
Batch number: 103550012A										
Aroclor 5432	0.10	U	0.10	0.50	ug/l					
Aroclor 5442	0.10	U	0.10	0.50	ug/l	44*	44*	75-125	0	30
Aroclor 5460	0.10	U	0.10	0.50	ug/l					
PCB-1016	0.10	U	0.10	0.50	ug/l	98	96	68-119	2	30
PCB-1221	0.10	U	0.10	0.50	ug/l					
PCB-1232	0.20	U	0.20	0.50	ug/l					
PCB-1242	0.10	U	0.10	0.50	ug/l					
PCB-1248	0.10	U	0.10	0.50	ug/l					
PCB-1254	0.10	U	0.10	0.50	ug/l					
PCB-1260	0.10	U	0.10	0.50	ug/l	92	96	68-121	4	30
PCB-1262	0.20	U	0.20	0.50	ug/l					
PCB-1268	0.16	U	0.16	0.50	ug/l					
Batch number: 103610029A										
Sample number(s): 6169016,6169019-6169023										
Aldrin	0.066	U	0.066	0.17	ug/kg	100		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	67		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	78		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	70		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	76		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	114		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	72		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	75		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	80		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	76		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	92		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	92		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	74		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	68		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	85		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	76		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	100		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	74		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 103610033A										
Sample number(s): 6169016,6169019-6169029										
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	68*	71*	75-125	4	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	103		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	126		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103620026A										
Sample number(s): 6169024-6169029										
EFH (C12-C14)	0.40	U	0.40	1.2	mg/kg	86		66-113		
EFH (C15-C20)	0.40	U	0.40	1.2	mg/kg	90		66-113		
EFH (C21-C30)	0.40	U	0.40	1.2	mg/kg	91		66-113		
EFH (C30 - C40)	0.40	U	0.40	1.2	mg/kg	88		66-113		
EFH (C8-C11)	0.40	U	0.40	1.2	mg/kg	73		66-113		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103540003A	Sample number(s): 6169024-6169029								
Ethanol	100 U	100.	500	ug/kg	95		75-112		
Isopropanol	100 U	100.	500	ug/kg	95		75-125		
Methanol	100 U	100.	500	ug/kg	91		75-134		
Batch number: 103540008A	Sample number(s): 6169024-6169029								
Diethylene glycol	5.0 U	5.0	13	mg/kg	95		75-125		
Ethylene glycol	5.0 U	5.0	13	mg/kg	97		75-125		
Propylene glycol	5.0 U	5.0	13	mg/kg	90		75-125		
Batch number: 103550028A	Sample number(s): 6169024-6169029								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	99		75-125		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	104		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	99		75-125		
Batch number: 103545713001	Sample number(s): 6169017-6169018								
Mercury	0.000050 U	0.00005	0.00020	mg/l	97		80-120		
Batch number: 103551848003	Sample number(s): 6169017-6169018								
Aluminum	0.0834 U	0.0834	0.200	mg/l	96	92	90-112	4	20
Boron	0.0138 U	0.0138	0.0500	mg/l	97	94	90-110	3	20
Calcium	0.0960 J	0.0702	0.200	mg/l	102	99	90-112	3	20
Iron	0.0522 U	0.0522	0.200	mg/l	102	98	90-112	4	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	100	98	80-120	2	20
Magnesium	0.0421 J	0.0172	0.100	mg/l	101	98	89-110	3	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	103	101	90-110	3	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	104	102	80-120	2	20
Potassium	0.239 U	0.239	0.500	mg/l	100	99	85-115	2	20
Sodium	0.433 U	0.433	1.00	mg/l	100	100	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	100	97	90-110	3	20
Tin	0.0098 U	0.0098	0.0200	mg/l	103	101	90-110	2	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	105	102	90-113	3	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	99	80-120	3	20
Batch number: 103556050002A	Sample number(s): 6169017-6169018								
Antimony	0.00030 U	0.00030	0.0010	mg/l	105	110	87-110	5	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	99	106	86-111	7	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	108	103	90-112	5	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	105	110	90-114	5	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	98	102	90-118	4	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	101	104	80-120	3	20
Copper	0.00038 U	0.00038	0.0020	mg/l	104	104	90-113	0	20
Lead	0.000052 U	0.00005	0.0010	mg/l	105	107	90-115	2	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	107	109	90-113	2	20
Silver	0.000080 U	0.00008	0.00050	mg/l	107	108	90-115	2	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	101	101	89-116	0	20
Vanadium	0.00016 U	0.00016	0.00050	mg/l	104	108	80-120	4	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	109	105	80-120	4	20
Batch number: 103556050002B	Sample number(s): 6169017-6169018								
Selenium	0.00025 U	0.00025	0.0020	mg/l	107	107	85-114	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103556050002C Molybdenum	0.00025 U	0.00025	0.00050	mg/l	106	103	80-120	2	20
Batch number: 103556050002D Barium	0.00038 U	0.00038	0.0020	mg/l	107	106	88-113	1	20
Batch number: 103571026002A	Sample number(s): 6169016, 6169019-6169029								
Antimony	0.0577 U	0.0577	0.192	mg/kg	63		11-208		
Arsenic	0.0577 U	0.0577	0.385	mg/kg	97		80-120		
Beryllium	0.0154 U	0.0154	0.0962	mg/kg	98		82-118		
Cadmium	0.0346 U	0.0346	0.0962	mg/kg	99		82-118		
Chromium	0.115 U	0.115	0.385	mg/kg	103		80-120		
Cobalt	0.0192 U	0.0192	0.0962	mg/kg	99		82-118		
Copper	0.203 J	0.0635	0.385	mg/kg	99		80-120		
Lead	0.0114 J	0.0100	0.192	mg/kg	98		80-120		
Nickel	0.121 J	0.0962	0.385	mg/kg	105		80-120		
Silver	0.0115 U	0.0115	0.0962	mg/kg	100		66-134		
Thallium	0.0288 U	0.0288	0.0962	mg/kg	101		81-119		
Vanadium	0.0212 U	0.0212	0.0962	mg/kg	94		90-110		
Zinc	0.601 J	0.538	2.88	mg/kg	101		78-122		
Batch number: 103571026002B Selenium	0.0385 U	0.0385	0.385	mg/kg	97		79-122		
Batch number: 103571026002C Molybdenum	0.0481 U	0.0481	0.0962	mg/kg	103		78-122		
Batch number: 103571026002D Barium	0.104 U	0.104	0.385	mg/kg	106		79-121		
Batch number: 103575708005	Sample number(s): 6169016, 6169019-6169029								
Aluminum	16.5 J	4.98	19.8	mg/kg	95		61-110		
Boron	0.881 U	0.881	4.95	mg/kg	90		78-110		
Calcium	13.9 J	6.07	19.8	mg/kg	98		88-110		
Iron	6.65 J	4.66	19.8	mg/kg	86		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	100		80-120		
Magnesium	2.51 U	2.51	9.90	mg/kg	97		82-110		
Manganese	0.0772 U	0.0772	0.495	mg/kg	98		81-119		
Phosphorus	1.41 J	0.554	9.90	mg/kg	100		80-120		
Potassium	17.8 U	17.8	49.5	mg/kg	98		78-110		
Sodium	36.9 U	36.9	99.0	mg/kg	98		87-110		
Strontium	0.0782 J	0.0614	0.495	mg/kg	98		79-121		
Tin	1.13 J	0.990	9.90	mg/kg	96		90-114		
Titanium	0.376 U	0.376	0.990	mg/kg	90		80-120		
Zirconium	0.832 U	0.832	4.95	mg/kg	100		80-120		
Batch number: 103575711006 Mercury	0.0027 U	0.0027	0.0934	mg/kg	110		88-123		
Batch number: 10352196301A 3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	104	106	90-110	2	20
Batch number: 10355196901A 11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	94	94	90-110	0	20
Batch number: 10363658701A 7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	93	96	85-115	3	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 10364102201A 21a Cyanide by 9012B	0.18 U	0.18	0.50	6169024-6169028 mg/kg	105		80-120		
Batch number: 10364102201B 21a Cyanide by 9012B	0.18 U	0.18	0.50	6169029 mg/kg	105		80-120		
Batch number: 11010010202A 11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	6169016, 6169019-6169027 mg/kg	107		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	104		90-110		
Batch number: 11010010202B 11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	6169028-6169029 mg/kg	107		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	104		90-110		
Batch number: 11010010203A 7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	6169016, 6169019-6169027 ug/kg	95		85-115		
Batch number: 11010010203B 7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	6169028-6169029 ug/kg	95		85-115		
Batch number: 11016243202A 3a Cr VI by EPA 7199	0.20 U	0.20	1.0	6169016, 6169019-6169029 mg/kg	99		80-120		
Batch number: 10355039402B 22a pH by 9045C				6169016, 6169019-6169026	100		95-105		
Batch number: 10355039403A 22a pH by 9045C				6169027-6169029	100		95-105		
Batch number: 10355182102B Oxidation Reduction Potential				6169016, 6169019-6169026	100		98-102		
Batch number: 10355182103A Oxidation Reduction Potential				6169027-6169029	100		98-102		
Batch number: 10354162401B 28a Moisture Content by 160.3				6169016, 6169019-6169023	100		80-120		
Batch number: 11011162401A 28a Moisture Content by 160.3				6169024-6169029	100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: B103543AA									
Acetone	117		15-210						
Benzene	114		55-143						
Bromobenzene	102		43-139						
Bromochloromethane	105		60-137						
Bromodichloromethane	103		53-136						

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
Bromoform	90		38-124						
Bromomethane	85		42-168						
2-Butanone	101		37-163						
n-Butylbenzene	107		30-146						
sec-Butylbenzene	111		33-157						
tert-Butylbenzene	108		41-152						
Carbon Tetrachloride	116		45-153						
Chlorobenzene	107		49-135						
Chloroethane	90		39-152						
2-Chloroethyl Vinyl Ether	97		32-139						
Chloroform	112		61-142						
Chloromethane	101		51-163						
2-Chlorotoluene	108		42-146						
4-Chlorotoluene	108		39-145						
1,2-Dibromo-3-chloropropane	81		30-139						
Dibromochloromethane	100		51-128						
1,2-Dibromoethane	98		54-129						
Dibromomethane	104		57-130						
1,2-Dichlorobenzene	97		36-133						
1,3-Dichlorobenzene	98		34-134						
1,4-Dichlorobenzene	98		35-136						
Dichlorodifluoromethane	91		26-151						
1,1-Dichloroethane	114		63-142						
1,2-Dichloroethane	107		68-131						
1,1-Dichloroethene	118		61-149						
cis-1,2-Dichloroethene	113		60-136						
trans-1,2-Dichloroethene	115		59-142						
1,2-Dichloropropane	109		62-135						
1,3-Dichloropropane	103		58-129						
2,2-Dichloropropane	109		53-147						
1,1-Dichloropropene	115		54-145						
cis-1,3-Dichloropropene	97		51-131						
trans-1,3-Dichloropropene	95		49-129						
Ethylbenzene	110		44-141						
Freon 113	120		56-156						
Hexachlorobutadiene	75		10-155						
2-Hexanone	70		32-160						
Isopropylbenzene	109		38-144						
p-Isopropyltoluene	109		29-152						
Methyl Tertiary Butyl Ether	97		55-129						
4-Methyl-2-pentanone	71		46-139						
Methylene Chloride	105		61-141						
n-Propylbenzene	117		39-157						
Styrene	103		35-134						
1,1,1,2-Tetrachloroethane	107		52-130						
1,1,1,2,2-Tetrachloroethane	100		40-152						
Tetrachloroethene	109		42-149						
Toluene	111		50-146						
1,2,3-Trichlorobenzene	65		10-140						
1,2,4-Trichlorobenzene	69		10-136						
1,1,1-Trichloroethane	110		64-142						
1,1,2-Trichloroethane	102		54-139						
Trichloroethene	110		53-144						

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Quality Control Summary

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Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Trichlorofluoromethane	101		47-163						
1,2,3-Trichloropropane	96		45-154						
1,2,4-Trimethylbenzene	109		37-149						
1,3,5-Trimethylbenzene	111		38-150						
Vinyl Chloride	100		50-154						
m+p-Xylene	110		44-137						
o-Xylene	105		42-137						
Batch number: E103541AA	Sample number(s): 6169030 UNSPK: P169422								
1,4-Dioxane	96		50-150						
Batch number: E103571AA	Sample number(s): 6169024-6169029 UNSPK: P172090								
1,4-Dioxane	86	89	70-130	6	30				
Batch number: 10362SLF026	Sample number(s): 6169016, 6169019-6169029 UNSPK: P172038								
Aniline	59	68	14-114	15	30				
Benzidine	35	19*	35-141	57*	30				
Benzoic acid	93	95	10-173	2	30				
Benzyl alcohol	86	89	55-123	4	30				
4-Bromophenyl-phenylether	90	92	67-129	3	30				
Carbazole	92	95	64-120	3	30				
4-Chloro-3-methylphenol	90	91	53-130	1	30				
4-Chloroaniline	74	80	23-95	9	30				
bis(2-Chloroethoxy)methane	93	96	54-117	3	30				
bis(2-Chloroethyl)ether	84	84	60-116	0	30				
bis(2-Chloroisopropyl)ether	86	87	55-142	1	30				
2-Chloronaphthalene	78	89	50-141	12	30				
2-Chlorophenol	90	94	73-121	5	30				
4-Chlorophenyl-phenylether	89	96	64-119	7	30				
Dibenzofuran	89	95	71-112	7	30				
1,2-Dichlorobenzene	87	89	66-108	2	30				
1,3-Dichlorobenzene	85	87	63-109	3	30				
1,4-Dichlorobenzene	86	88	53-113	3	30				
3,3'-Dichlorobenzidine	77	84	25-123	10	30				
2,4-Dichlorophenol	90	96	78-117	6	30				
2,4-Dimethylphenol	91	94	56-130	4	30				
3,5-Dimethylphenol	101	104	70-130	3	30				
4,6-Dinitro-2-methylphenol	78	76	10-148	3	30				
2,4-Dinitrophenol	68	66	20-143	3	30				
2,4-Dinitrotoluene	93	98	57-114	6	30				
2,6-Dinitrotoluene	91	97	69-123	6	30				
1,2-Diphenylhydrazine	99	101	71-129	2	30				
Hexachlorobenzene	94	96	61-111	2	30				
Hexachlorobutadiene	98	101	62-120	4	30				
Hexachlorocyclopentadiene	79	85	10-153	7	30				
Hexachloroethane	91	94	57-109	4	30				
Isophorone	87	92	51-118	5	30				
2-Methylphenol	87	90	47-142	4	30				
4-Methylphenol	84	89	55-126	5	30				
2-Nitroaniline	102	109	67-125	7	30				
3-Nitroaniline	91	96	59-122	6	30				
4-Nitroaniline	75	91	52-112	20	30				
Nitrobenzene	97	97	51-114	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Nitrophenol	93	94	74-115	1	30				
4-Nitrophenol	99	106	39-133	7	30				
N-Nitroso-di-n-propylamine	86	90	60-116	4	30				
N-Nitrosodiphenylamine	93	97	86-145	4	30				
Pentachlorophenol	79	80	17-149	1	30				
Phenol	86	93	58-126	8	30				
1,2,4-Trichlorobenzene	89	96	72-115	7	30				
2,4,5-Trichlorophenol	97	102	34-139	5	30				
2,4,6-Trichlorophenol	100	107	49-140	7	30				
Batch number: 10362SLK026 Sample number(s): 6169016,6169019-6169029 UNSPK: P172038									
Acenaphthene	97	96	63-105	1	30				
Acenaphthylene	93	98	55-126	5	30				
Anthracene	98	94	46-136	4	30				
Benzo(a)anthracene	101	108	39-144	6	30				
Benzo(a)pyrene	95	98	34-156	3	30				
Benzo(b)fluoranthene	106	107	43-155	1	30				
Benzo(g,h,i)perylene	70	63	33-141	9	30				
Benzo(k)fluoranthene	98	106	42-144	8	30				
Butylbenzylphthalate	120	128	73-140	7	30				
Di-n-butylphthalate	111	111	78-160	0	30				
Chrysene	89	93	29-156	4	30				
Dibenz(a,h)anthracene	84	78	41-130	6	30				
Diethylphthalate	102	112	87-131	9	30				
Dimethylphthalate	102	112	74-118	9	30				
Bis(2-Ethylhexyl)phthalate	82	109	39-167	19	30				
Fluoranthene	97	100	26-166	3	30				
Fluorene	98	105	45-121	7	30				
Indeno(1,2,3-cd)pyrene	82	74	21-143	10	30				
1-Methylnaphthalene	94	93	72-123	1	30				
2-Methylnaphthalene	87	86	28-121	1	30				
Naphthalene	94	99	61-102	5	30				
N-Nitrosodimethylamine	101	23*	48-113	126*	30				
Di-n-octylphthalate	88	95	40-192	6	30				
Phenanthrene	93	96	12-165	3	30				
Pyrene	87	92	15-153	5	30				
Batch number: 10363SLG026 Sample number(s): 6169024-6169029 UNSPK: P172090									
N-Nitrosodimethylamine	69*	69*	70-130	0	30				
Batch number: 103630002A Sample number(s): 6169024-6169029 UNSPK: P172090									
4-Amino-2,6-Dinitrotoluene	94	101	80-127	7	50				
2-Amino-4,6-Dinitrotoluene	93	99	80-137	6	50				
1,3-Dinitrobenzene	96	100	38-166	4	50				
2,4-Dinitrotoluene	93	98	80-131	5	50				
2,6-Dinitrotoluene	98	104	80-127	5	50				
HMX	80	87	63-128	8	50				
Nitrobenzene	100	102	80-125	2	50				
Nitroglycerin	83	89	80-120	6	50				
2-Nitrotoluene	101	105	80-122	4	50				
3-Nitrotoluene	101	105	72-119	3	50				
4-Nitrotoluene	100	104	80-125	4	50				
PETN	92	99	80-121	8	50				

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Quality Control Summary

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Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
RDX	85	93	75-129	9	50				
Tetryl	99	109	55-174	10	50				
1,3,5-Trinitrobenzene	106	112	82-126	5	50				
2,4,6-Trinitrotoluene	95	100	82-130	6	50				
Batch number: 103560015A	Sample number(s): 6169024-6169029 UNSPK: P167517								
17a Formaldehyde by 8315A	92	94	80-120	1	50				
Batch number: 103620013A	Sample number(s): 6169016,6169019-6169023 UNSPK: 6169016								
2,4-D	101	106	28-161	5	35				
Dalapon	31	37	12-86	19	50				
2,4-DB	74	69	20-170	7	50				
Dicamba	145*	92	33-120	45	50				
Dinoseb	10	10	1-44	0	35				
2,4-DP (Dichlorprop)	187*	158*	55-141	17	50				
MCPA	126	127	31-184	1	50				
MCPP (Mecoprop)	76	80	16-174	5	50				
2,4,5-T	81	83	25-132	3	35				
2,4,5-TP	82	83	10-183	1	35				
Batch number: 103610029A	Sample number(s): 6169016,6169019-6169023 UNSPK: P167524								
Aldrin	79	70	16-126	12	50				
Alpha BHC	52	45	10-129	13	50				
Beta BHC	69	59	14-147	15	50				
Gamma BHC - Lindane	58	48	10-140	17	50				
p,p-DDD	55	67	16-163	20	50				
p,p-DDE	52	42	18-161	12	50				
p,p-DDT	-94*	2*	10-176	54*	50				
Delta BHC	66	59	23-140	10	50				
Dieldrin	58	56	19-154	3	50				
Endosulfan I	45	39	16-137	14	50				
Endosulfan II	52	49	28-154	4	50				
Endosulfan Sulfate	111	95	21-160	15	50				
Endrin	58	56	11-149	3	50				
Endrin Aldehyde	59	41	10-148	24	35				
Endrin Ketone	58	49	22-165	13	50				
Heptachlor	61	52	13-126	16	50				
Heptachlor Epoxide	70	67	13-157	4	50				
Methoxychlor	83	64	32-147	26	50				
Batch number: 103610033A	Sample number(s): 6169016,6169019-6169029 UNSPK: P172060								
PCB-1016	72	85	29-146	16	50				
PCB-1260	51	67	39-149	17	50				
Batch number: 103620026A	Sample number(s): 6169024-6169029 UNSPK: P172090								
EFH (C12-C14)	74	69	49-123	7	20				
EFH (C15-C20)	97	90	49-123	8	20				
EFH (C21-C30)	55	41*	49-123	11	20				
EFH (C30 - C40)	17*	-23*	49-123	29*	20				
EFH (C8-C11)	54	56	49-123	4	20				
Batch number: 103540003A	Sample number(s): 6169024-6169029 UNSPK: P167520								
Ethanol	80	81	24-143	1	20				

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Quality Control Summary

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Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Isopropanol	79	82	75-125	3	20				
Methanol	89	89	45-136	1	20				
Batch number: 103540008A	Sample number(s): 6169024-6169029 UNSPK: P167517								
Diethylene glycol	12*	24*	59-109	69*	20				
Ethylene glycol	50*	67	63-107	28*	20				
Propylene glycol	47*	59*	63-107	23*	20				
Batch number: 103550028A	Sample number(s): 6169024-6169029 UNSPK: 6169024								
m-Terphenyl	96	95	75-125	1	20				
o-Terphenyl	105	102	75-125	3	20				
p-Terphenyl	99	95	75-125	5	20				
Batch number: 103571026002A	Sample number(s): 6169016, 6169019-6169029 UNSPK: P172316 BKG: P172316								
Antimony	37*	45*	75-125	14	20	0.0932 J	0.0866 J	7 (1)	20
Arsenic	151*	199*	75-125	11	20	5.16	5.63	9	20
Beryllium	111	111	75-125	1	20	0.480	0.449	7 (1)	20
Cadmium	142*	135*	75-125	5	20	0.194	0.180	8 (1)	20
Chromium	150*	166*	75-125	4	20	17.0	16.9	1	20
Cobalt	118	122	75-125	2	20	4.92	5.20	5	20
Copper	126*	132*	75-125	2	20	7.26	7.63	5	20
Lead	164*	179*	75-125	3	20	8.38	8.14	3	20
Nickel	143*	143*	75-125	1	20	10.1	10.7	5	20
Silver	121	121	75-125	0	20	0.0239 J	0.0312 J	27* (1)	20
Thallium	123	124	75-125	0	20	0.247	0.260	5 (1)	20
Vanadium	185*	203*	75-125	3	20	35.5	35.5	0	20
Zinc	226 (2)	210 (2)	75-125	2	20	59.3	61.8	4	20
Batch number: 103571026002B	Sample number(s): 6169016, 6169019-6169029 UNSPK: P172316 BKG: P172316								
Selenium	105	109	75-125	3	20	0.128 J	0.132 J	3 (1)	20
Batch number: 103571026002C	Sample number(s): 6169016, 6169019-6169029 UNSPK: P172316 BKG: P172316								
Molybdenum	139*	140*	75-125	0	20	0.382	0.391	2 (1)	20
Batch number: 103571026002D	Sample number(s): 6169016, 6169019-6169029 UNSPK: P172316 BKG: P172316								
Barium	306 (2)	253 (2)	75-125	5	20	86.9	85.9	1	20
Batch number: 103575708005	Sample number(s): 6169016, 6169019-6169029 UNSPK: P172316 BKG: P172316								
Aluminum	726 (2)	535 (2)	75-125	3	20	12,200	11,600	5	20
Boron	94	92	84-115	2	20	3.89 J	3.90 J	0 (1)	20
Calcium	153 (2)	145 (2)	75-125	1	20	2,460	2,400	2	20
Iron	-881 (2)	-1536 (2)	75-125	4	20	18,500	16,900	9	20
Lithium	97	93	82-114	3	20	24.4	22.3	9	20
Magnesium	-20 (2)	-81 (2)	75-125	2	20	5,230	4,770	9	20
Manganese	49 (2)	40 (2)	75-125	1	20	277	251	10	20
Phosphorus	82 (2)	81 (2)	75-125	0	20	419	406	3	20
Potassium	95	89	75-125	1	20	3,290	3,050	8	20
Sodium	102	99	75-125	3	20	62.6 J	59.3 J	6 (1)	20
Strontium	97	94	75-115	2	20	11.4	11.8	4	20
Tin	88	86	80-110	2	20	1.76 J	1.64 J	7 (1)	20
Titanium	186 (2)	192 (2)	75-125	0	20	1,130	1,080	5	20
Zirconium	93	91	75-125	2	20	3.69 J	3.70 J	0 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103575711006 Mercury	Sample number(s): 6169016, 6169019-6169029 103 102 65-135 6 20	UNSPK: P172316 BKG: P172316 0.0027 U 0.0028 U	0 (1)	20					
Batch number: 10364102201A 21a Cyanide by 9012B	Sample number(s): 6169024-6169028 101 75-125	UNSPK: 6169028 BKG: 6169028 0.17 U 0.18 U	0 (1)	20					
Batch number: 10364102201B 21a Cyanide by 9012B	Sample number(s): 6169029 104 75-125	UNSPK: P172090 BKG: P172090 0.18 U 0.17 U	0 (1)	20					
Batch number: 11010010202A 11a Anions by 300.0 - Fluoride	Sample number(s): 6169016, 6169019-6169027 96 80-120	UNSPK: 6169019 BKG: 6169019 0.96 J 0.92 J	4 (1)	20					
11a Anions by 300.0 - Nitrate	110 80-120	7.3 6.3	15 (1)	20					
Batch number: 11010010202B 11a Anions by 300.0 - Fluoride	Sample number(s): 6169028-6169029 64* 80-120	UNSPK: 6169028 BKG: 6169028 5.6 4.7	17 (1)	20					
11a Anions by 300.0 - Nitrate	92 80-120	0.95 J 1.1 J	17 (1)	20					
Batch number: 11010010203A 7a Perchlorate EPA 314.0	Sample number(s): 6169016, 6169019-6169027 105 80-120	UNSPK: 6169019 BKG: 6169019 9.0 U 9.0 U	0 (1)	15					
Batch number: 11010010203B 7a Perchlorate EPA 314.0	Sample number(s): 6169028-6169029 104 80-120	UNSPK: 6169028 BKG: 6169028 9.0 U 9.0 U	0 (1)	15					
Batch number: 11016243202A 3a Cr VI by EPA 7199	Sample number(s): 6169016, 6169019-6169029 84 75-125	UNSPK: P172038 BKG: P172038 0.49 J 0.61 J	22* (1)	20					
Batch number: 10355039402B 22a pH by 9045C	Sample number(s): 6169016, 6169019-6169026 7.56	BKG: 6169019 7.59	0	1					
Batch number: 10355039403A 22a pH by 9045C	Sample number(s): 6169027-6169029 7.78	BKG: 6169029 7.74	1	1					
Batch number: 10355182102B Oxidation Reduction Potential	Sample number(s): 6169016, 6169019-6169026 515	BKG: 6169019 511	1	6					
Batch number: 10355182103A Oxidation Reduction Potential	Sample number(s): 6169027-6169029 480	BKG: 6169029 487	1	6					
Batch number: 10354162401B 28a Moisture Content by 160.3	Sample number(s): 6169016, 6169019-6169023 12.4	BKG: P158227 12.9	3	20					
Batch number: 11011162401A 28a Moisture Content by 160.3	Sample number(s): 6169024-6169029 9.7	BKG: P167523 9.7	0	20					

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Surrogate Quality Control

Analysis Name: 1a Volatile Organics EPA 8260B

Batch number: B103543AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6169024	103	102	99	90
6169025	104	99	98	92
6169026	105	104	97	93
6169027	104	101	97	89
6169028	103	100	98	92
6169029	106	107	97	93
Blank	102	99	98	93
LCS	99	102	100	100
LCSD	99	101	100	100
MS	100	100	103	97

Limits: 80-120 80-120 81-117 74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM

Batch number: E103541AA

	Toluene-d8
6169030	102
Blank	102
LCS	101
LCSD	101
MS	101

Limits: 80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM

Batch number: E103571AA

	Toluene-d8
6169024	99
6169025	100
6169026	99
6169027	100
6169028	100
6169029	100
Blank	101
LCS	100
LCSD	100
MS	100
MSD	100

Limits: 70-130

Analysis Name: 1b Volatile Organics EPA8260

Batch number: Y103572AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6169030	106	99	106	103
Blank	104	100	106	103
LCS	106	101	107	104
LCSD	106	102	107	105

Limits: 86-118 80-120 88-110 86-115

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Surrogate Quality Control

Analysis Name: 4b Select SVOC EPA 8270SIM

Batch number: 10354WAI026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6169017	88	74	70
6169018	84	74	64
Blank	70	64	83
LCS	76	66	83
LCSD	78	65	84

Limits: 40-130 45-130 45-135

Analysis Name: 5b Semivolatiles by EPA 8270C

Batch number: 10354WAM026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6169017	64	45	100	85	75	83
6169018	62	44	81	85	79	82
Blank	63	43	86	85	80	83
LCS	59	40	89	85	84	79
LCSD	71	49	99	92	91	86

Limits: 20-130 20-120 30-130 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 10362SLF026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6169016	83	81	96	82	88	88
6169019	87	87	95	82	92	92
6169020	86	86	97	82	91	89
6169021	87	89	100	82	92	90
6169022	42	44	47	44	50	47
6169023	82	84	97	80	90	89
6169024	78	78	88	75	84	81
6169025	88	89	98	80	91	85
6169026	84	83	94	77	86	83
6169027	85	87	104	80	92	92
6169028	85	85	99	77	87	85
6169029	85	85	97	80	88	90
Blank	81	81	90	78	87	79
LCS	87	87	100	90	91	83
MS	83	82	99	87	87	90
MSD	90	90	107	92	95	88

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 4a Select SVOC EPA 8270SIM

Batch number: 10362SLK026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6169016	99	84	88
6169019	96	86	90
6169020	99	87	92
6169021	98	87	93
6169022	101	87	94

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Surrogate Quality Control

6169023	96	83	91
6169024	98	87	97
6169025	97	83	95
6169026	93	81	94
6169027	96	88	87
6169028	93	84	87
6169029	93	85	87
Blank	92	82	94
LCS	95	83	97
MS	102	85	92
MSD	99	91	96

Limits: 40-130 45-130 45-135

Analysis Name: 19a NDMA by 1625C
Batch number: 10363SLG026
N-Nitrosodimethylamine-
d6

6169024	143
6169025	141
6169026	143
6169027	142
6169028	86
6169029	105
Blank	104
LCS	110
MS	152*
MSD	151*

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 10354A34A
Trifluorotoluene-F

6169024	91
6169025	89
6169026	85
6169027	81
6169028	92
6169029	81
Blank	90
LCS	91
LCSD	98

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 10355B20A
Trifluorotoluene-F

6169030	83
Blank	83
LCS	113
LCSD	110

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Surrogate Quality Control

Limits: 63-135

Analysis Name: 12b Pesticides by 8081A
Batch number: 103550011A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6169017	95	85
6169018	100	98
Blank	90	92
LCS	96	89
LCSD	99	101

Limits: 52-141 40-144

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 103550012A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6169017	114	96
6169018	111	100
Blank	117	85
LCS	110	75
LCSD	106	81

Limits: 30-150 45-120

Analysis Name: 17a Formaldehyde by 8315A
Batch number: 103560015A

Butyraldehyde

6169024	103
6169025	104
6169026	112
6169027	110
6169028	106
6169029	103
Blank	106
LCS	95
MS	109
MSD	100

Limits: 64-126

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 103560021A

2,4-Dichlorophenylacetic
acid

6169017	109
6169018	107
Blank	116
LCS	126
LCSD	132

Limits: 35-144

Analysis Name: 12a Pesticides by 8081A

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Surrogate Quality Control

Batch number: 103610029A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6169016	67	227*
6169019	72	92
6169020	64	76
6169021	47*	36
6169022	62	80
6169023	11*	0*
Blank	68	76
LCS	68	82
MS	60	84
MSD	53	46

Limits: 50-130 20-120

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 103610033A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6169016	96	116
6169019	89	113
6169020	99	136*
6169021	94	119
6169022	115	150*
6169023	93	113
6169024	98	136*
6169025	91	103
6169026	72	85
6169027	84	100
6169028	84	97
6169029	106	126*
Blank	97	119
LCS	101	123*
LCSD	106	121*
MS	65	63
MSD	78	74

Limits: 53-139 45-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 103620013A
2,4-Dichlorophenylacetic
acid

6169016	76
6169019	103
6169020	108
6169021	107
6169022	111
6169023	104
Blank	87
LCS	95
MS	73
MSD	76

Limits: 36-156

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Surrogate Quality Control

Analysis Name: 20a Energetics by 8330A
Batch number: 103630002A
2-Nitro-m-xylene

6169024	117
6169025	107
6169026	117
6169027	105
6169028	103
6169029	117
Blank	114
LCS	124
LCSD	114
MS	111
MSD	117

Limits: 80-146

Analysis Name: 25a Alcohols by 8015B
Batch number: 103540003A
Acetone

6169024	87
6169025	84
6169026	77
6169027	79
6169028	75
6169029	84
Blank	95
LCS	96
MS	84
MSD	85

Limits: 42-138

Analysis Name: 27a Glycols by 8015B
Batch number: 103540008A
Tetramethylene glycol

6169024	86
6169025	52
6169026	85
6169027	37*
6169028	85
6169029	27*
Blank	102
LCS	102
MS	52
MSD	54

Limits: 50-119

Analysis Name: 26a Terphenyls by 8015B
Batch number: 103550028A
n-Triacontane-d62

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/27/11 at 12:46 PM

Group Number: 1226239

Surrogate Quality Control

6169024 86
6169025 95
6169026 92
6169027 93
6169028 96
6169029 96
Blank 97
LCS 94
MS 86
MSD 84

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 103620026A

	Chlorobenzene	Orthoterphenyl
6169024	73	81
6169025	71	75
6169026	68	75
6169027	61	73
6169028	73	80
6169029	56	78
Blank	75	85
LCS	79	88
MS	76	84
MSD	75	84

Limits: 37-125 47-145

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

acct #13013 Cup #1226239

sample # 6169016-30

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD																Other Instructions and Notes						
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels For lead chrome analysis, lab will measure pH and ORP						VOCs EPA 8250B	1,4-Dioxane EPA 8260B	SVOCs EPA 8270C & PAHs 8270.5M	TPH-GRO EPA 801.5B	TPH-LEH EPA 801.5B Mod.	*Metals EPA 8210/8230/8240/8241A	*Hex Chroms EPA 7199*	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dieldrin/Furan EPA 813B	*Pesticides EPA 814D	Pesticides Confirmation by EPA 815D	*Pesticides EPA 8081A (surface soil only)	*Nitrates EPA 300.0	*Formaldehyde EPA 815A	*H-MDMA EPA 1625C		*Emergentals EPA 830A	*Cyanide EPA 8012B	*Pd EPA 9045C	*Terphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohols EPA 8015B
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																							
DUP08-SASB-QC-121710	12.17.10	1407	soil	none	1 x 16 oz. jar & 16" sleeve																							surface soil DUP
EB05-SASB-121710	12.17.10	1235	water	none	6-1 liter ambers																							surface tool rinse
EB05-SASB-121710	12.17.10	1235	water	none	1-500 ml poly																							surface tool rinse
EB05-SASB-121710	12.17.10	1235	water	HNO3	1-500 ml poly																							surface tool rinse
EB01-SIV-121710	12.17.10	1235	water	none	6-1 liter ambers																							sediment tool rinse
EB01-SIV-121710	12.17.10	1235	water	none	1-500 ml poly																							sediment tool rinse
EB01-SIV-121710	12.17.10	1235	water	HNO3	1-500 ml poly																							sediment tool rinse
SED-014-SIV-SD-0.0-0.5	12.17.10	0844	soil	none	1 x 16 oz. jars & 16" sleeves																							
SED-012-SIV-SD-0.0-0.5	12.17.10	1024	soil	none	1 x 16 oz. jar & 16" sleeve																							
SED-006-SIV-SD-0.0-0.5	12.17.10	1525	soil	none	1 x 16 oz. jar & 16" sleeve																							
SED-001-SIV-SD-0.0-0.5	12.17.10	1241	soil	none	1 x 16 oz. jar & 16" sleeve																							
SED-004-SIV-SD-0.0-0.5	12.17.10	1142	soil	none	1 x 16 oz. jars & 16" sleeves																							
SL-282-SASB-SB-4.0-5.0	12.17.10	1020	soil	none	4 16 oz. jars																							
SL-282-SASB-SB-4.5	12.17.10	1015	soil	none	5 Encore Samplers																							
SL-282-SASB-SB-7.5	12.17.10	1024	soil	none	5 Encore Samplers																							
SL-282-SASB-SB-7.0-8.0	12.17.10	1028	soil	none	4 16 oz. jars																							
SL-281-SASB-SB-4.0-5.0	12.17.10	1230	soil	none	4 16 oz. jars																							
SL-281-SASB-SB-4.5	12.17.10	1225	soil	none	5 Encore Samplers																							
SL-281-SASB-SB-8.0-9.0	12.17.10	1237	soil	none	4 16 oz. jars																							
SL-281-SASB-SB-8.5	12.17.10	1233	soil	none	5 Encore Samplers																							
SL-026-SASB-4.0-5.0	12.17.10	1508	soil	none	4 16 oz. jars																							
SL-026-SASB-4.5	12.17.10	1503	soil	none	5 Encore Samplers																							
SL-026-SASB-9.0-10	12.17.10	1519	soil	none	4 16 oz. jars																							
SL-026-SASB-Q.5	12.17.10	1513	soil	none	5 Encore Samplers																							
SL-207-SASB-SS-0.0-0.5	12.17.10	1110	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-208-SASB-SS-0.0-0.5	12.17.10	1053	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-276-SASB-SS-0.0-0.5	12.17.10	0930	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-210-SASB-SS-0.0-0.5	12.17.10	1128	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-275-SASB-SS-0.0-0.5	12.17.10	0945	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-206-SASB-SS-0.0-0.5	12.17.10	1010	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-209-SASB-SS-0.0-0.5	12.17.10	1142	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-161-SASB-SS-0.0-0.5	12.17.10	1004	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-162-SASB-SS-0.0-0.5	12.17.10	0942	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-274-SASB-SS-0.0-0.5	12.17.10	1128	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-166-SASB-SS-0.0-0.5	12.17.10	1108	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-160-SASB-SS-0.0-0.5	12.17.10	1122	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-211-SASB-SS-0.0-0.5MS	12.17.10	1402	soil	none	2 x 16 oz. jars & 2 6" sleeves																							
SL-278-SASB-SS-0.0-0.5	12.17.10	1411	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-279-SASB-SS-0.0-0.5	12.17.10	1428	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-277-SASB-SS-0.0-0.5	12.17.10	1355	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-273-SASB-SS-0.0-0.5	12.17.10	1420	soil	none	1 x 16 oz. jar & 16" sleeve																							
SL-272-SASB-SS-0.0-0.5	12.17.10	1440	soil	none	1 x 16 oz. jar & 16" sleeve																							
TB-121710	12.17.10	0800	water	HCl	4-40 mL clear VOA vials																							trip blank
Date/Time: 12.17.10 1700 Date/Time: 12/18/10 1240 Lab No.: 00732992						Laboratory: Lancaster Laboratories, Inc. No. of coolers = 5																						

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 24, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/18/2010

Group Number: 1226240

SDG: DX029

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample DescriptionDUP08-SA5B-QC-121710 Soil
EB05-SA5B-121710 Water
EB01-SIV-121710 Water
SED-014-SIV-SD-0.0-0.5 Sediment
SED-012-SIV-SD-0.0-0.5 Sediment
SED-006-SIV-SD-0.0-0.5 Sediment
SED-001-SIV-SD-0.0-0.5 Sediment
SED-004-SIV-SD-0.0-0.5 Sediment
SL-282-SA5B-SB-4.0-5.0 Soil
SL-282-SA5B-SB-7.0-8.0 Soil
SL-281-SA5B-SB-4.0-5.0 Soil
SL-281-SA5B-SB-8.0-9.0 Soil
SL-026-SA5B-SB-4.0-5.0 Soil
SL-026-SA5B-SB-9.0-10 SoilLancaster Labs (LLI) #6169031
6169032
6169033
6169034
6169035
6169036
6169037
6169038
6169039
6169040
6169041
6169042
6169043
6169044

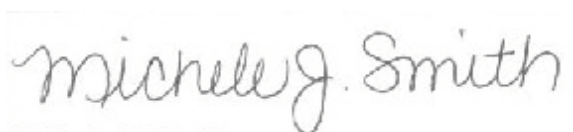
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169031
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2901 SDG#: DX029-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169031
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2901 SDG#: DX029-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	2.77	0.0933	1.12	1
11031	12378-PeCDD	40321-76-4	12.4	0.194	5.61	1
			BQ			
11031	123478-HxCDD	39227-28-6	23.6	0.145	5.61	1
			B			
11031	123678-HxCDD	57653-85-7	114	0.149	5.61	1
			B			
11031	123789-HxCDD	19408-74-3	41.9	0.143	5.61	1
			B			
11031	1234678-HpCDD	35822-46-9	2,720	0.320	5.61	1
			EB			
11031	OCDD	3268-87-9	26,800	0.278	11.2	1
			EB			
11031	2378-TCDF	51207-31-9	5.17	0.304	1.12	1
11650	2378-TCDF-Conf	51207-31-9	5.44	0.0863	1.12	1
			B			
11031	12378-PeCDF	57117-41-6	7.75	0.0822	5.61	1
			B			
11031	23478-PeCDF	57117-31-4	7.55	0.0860	5.61	1
			B			
11031	123478-HxCDF	70648-26-9	20.8	0.180	5.61	1
			B			
11031	123678-HxCDF	57117-44-9	22.8	0.163	5.61	1
			B			
11031	123789-HxCDF	72918-21-9	4.86	0.198	5.61	1
			JB			
11031	234678-HxCDF	60851-34-5	41.3	0.179	5.61	1
			B			
11031	1234678-HpCDF	67562-39-4	483	0.111	5.61	1
			B			
11031	1234789-HpCDF	55673-89-7	59.8	0.148	5.61	1
			B			
11031	OCDF	39001-02-0	1,130	0.106	11.2	1
			B			

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	85	25 - 164
13C12-2378-TCDF-Conf	70	24 - 169
13C12-12378-PeCDD	91	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	99	23 - 140
13C12-OCDD	108	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	89	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	83	26 - 123

*=This limit was used in the evaluation of the final result

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169031
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2901 SDG#: DX029-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-234678-HxCDF	80	28 - 136			
	13C12-123789-HxCDF	85	29 - 147			
	13C12-1234678-HpCDF	94	28 - 143			
	13C12-1234789-HpCDF	89	26 - 138			
	13C12-0CDF	91	17 - 157			
	13C12-1278-TCDD (CRS)	94	35 - 197			

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169031
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2901 SDG#: DX029-01FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 00:21	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11012001	02/06/2011 14:01	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169032
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2902 SDG#: DX029-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	2.31 U	2.31	2.18	1
10915	12378-PeCDD	40321-76-4	0.462 U	0.462	10.9	1
10915	123478-HxCDD	39227-28-6	0.163 U	0.163	10.9	1
10915	123678-HxCDD	57653-85-7	0.166 U	0.166	10.9	1
10915	123789-HxCDD	19408-74-3	0.250 JBQ	0.179	10.9	1
10915	1234678-HpCDD	35822-46-9	0.726 JBQ	0.214	10.9	1
10915	OCDD	3268-87-9	1.35 JB	0.225	21.8	1
10915	2378-TCDF	51207-31-9	0.188 U	0.188	2.18	1
10915	12378-PeCDF	57117-41-6	0.220 JBQ	0.146	10.9	1
10915	23478-PeCDF	57117-31-4	0.732 JB	0.120	10.9	1
10915	123478-HxCDF	70648-26-9	0.379 JBQ	0.114	10.9	1
10915	123678-HxCDF	57117-44-9	0.332 JBQ	0.111	10.9	1
10915	123789-HxCDF	72918-21-9	0.355 JBQ	0.112	10.9	1
10915	234678-HxCDF	60851-34-5	0.344 JBQ	0.103	10.9	1
10915	1234678-HpCDF	67562-39-4	1.18 JBQ	0.0890	10.9	1
10915	1234789-HpCDF	55673-89-7	0.193 JBQ	0.103	10.9	1
10915	OCDF	39001-02-0	0.858 JBQ	0.233	21.8	1

The recoveries of several labeled compounds were outside QC limits in this sample and the blank and OPR associated with this sample. The sample was re-extracted outside the project specified holding time with all labeled compound recoveries within QC specification. Comparable native compound results were observed between the two extractions.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	4	25 - 164
13C12-12378-PeCDD	27	25 - 181
13C12-123478-HxCDD	45	32 - 141
13C12-123678-HxCDD	43	28 - 130
13C12-123789-HxCDD	40	28 - 130
13C12-1234678-HpCDD	52	23 - 140
13C12-OCDD	51	17 - 157
13C12-2378-TCDF	46	24 - 169
13C12-12378-PeCDF	52	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	49	26 - 152
13C12-123678-HxCDF	48	26 - 123
13C12-234678-HxCDF	52	28 - 136
13C12-123789-HxCDF	53	29 - 147
13C12-1234678-HpCDF	52	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	49	17 - 157
13C12-1278-TCDD (CRS)	8	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

*=This limit was used in the evaluation of the final result

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169032
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

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14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2902 SDG#: DX029-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
E	Exceeds calibration range					
C	Confirmed quantitation on secondary GC column					
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	10362001	12/30/2010 22:09	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	10362001	12/28/2010 06:30	Ginelle L Haines	1

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169033
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2903 SDG#: DX029-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.546 U	0.546	2.16	1
10915	12378-PeCDD	40321-76-4	0.529 JBQ	0.283	10.8	1
10915	123478-HxCDD	39227-28-6	0.137 U	0.137	10.8	1
10915	123678-HxCDD	57653-85-7	0.185 JBQ	0.144	10.8	1
10915	123789-HxCDD	19408-74-3	0.194 JBQ	0.146	10.8	1
10915	1234678-HpCDD	35822-46-9	1.91 JBQ	0.177	10.8	1
10915	OCDD	3268-87-9	13.7 JB	0.197	21.6	1
10915	2378-TCDF	51207-31-9	0.167 U	0.167	2.16	1
10915	12378-PeCDF	57117-41-6	0.139 JBQ	0.114	10.8	1
10915	23478-PeCDF	57117-31-4	0.626 JB	0.0958	10.8	1
10915	123478-HxCDF	70648-26-9	0.522 JB	0.113	10.8	1
10915	123678-HxCDF	57117-44-9	0.325 JBQ	0.107	10.8	1
10915	123789-HxCDF	72918-21-9	0.252 JBQ	0.108	10.8	1
10915	234678-HxCDF	60851-34-5	0.283 JBQ	0.101	10.8	1
10915	1234678-HpCDF	67562-39-4	1.69 JB	0.0843	10.8	1
10915	1234789-HpCDF	55673-89-7	0.377 JBQ	0.0955	10.8	1
10915	OCDF	39001-02-0	1.41 JBQ	0.198	21.6	1

The recoveries of several labeled compounds were outside QC limits in this sample and the blank and OPR associated with this sample. The sample was re-extracted outside the project specified holding time with all labeled compound recoveries within QC specification. Comparable native compound results were observed between the two extractions.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	16	25 - 164
13C12-12378-PeCDD	48	25 - 181
13C12-123478-HxCDD	59	32 - 141
13C12-123678-HxCDD	56	28 - 130
13C12-123789-HxCDD	56	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	60	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	63	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	21	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

*=This limit was used in the evaluation of the final result

Sample Description: **EB01-SIV-121710 Water**
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # **WW 6169033**
LLI Group # **1226240**
Account # **13013**

Project Name: **SSFL Area IV Collocated Soil Sampling**

Collected: 12/17/2010 12:35

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14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2903 SDG#: DX029-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
E	Exceeds calibration range					
C	Confirmed quantitation on secondary GC column					
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	10362001	12/30/2010 23:05	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	10362001	12/28/2010 06:30	Ginelle L Haines	1



Analysis Report

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Page 1 of 4

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169034
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2904 SDG#: DX029-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	15.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169034
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2904 SDG#: DX029-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.217 J	0.0620	1.18	1
11031	12378-PeCDD	40321-76-4	2.80 JB	0.107	5.88	1
11031	123478-HxCDD	39227-28-6	8.92 B	0.140	5.88	1
11031	123678-HxCDD	57653-85-7	83.8 B	0.140	5.88	1
11031	123789-HxCDD	19408-74-3	14.7 B	0.141	5.88	1
11031	1234678-HpCDD	35822-46-9	4,430 EB	0.410	5.88	1
11031	OCDD	3268-87-9	49,800 EB	0.354	11.8	1
11031	2378-TCDF	51207-31-9	0.384 JQ	0.111	1.18	1
11031	12378-PeCDF	57117-41-6	0.711 JB	0.0765	5.88	1
11031	23478-PeCDF	57117-31-4	1.14 JB	0.0721	5.88	1
11031	123478-HxCDF	70648-26-9	18.1 B	0.202	5.88	1
11031	123678-HxCDF	57117-44-9	12.4 B	0.191	5.88	1
11031	123789-HxCDF	72918-21-9	2.86 JB	0.235	5.88	1
11031	234678-HxCDF	60851-34-5	12.9 B	0.200	5.88	1
11031	1234678-HpCDF	67562-39-4	455 B	0.176	5.88	1
11031	1234789-HpCDF	55673-89-7	85.3 B	0.219	5.88	1
11031	OCDF	39001-02-0	2,920 B	0.139	11.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	94	23 - 140
13C12-OCDD	104	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	77	28 - 136

*=This limit was used in the evaluation of the final result

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169034
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2904 SDG#: DX029-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-123789-HxCDF	79	29 - 147			
	13C12-1234678-HpCDF	85	28 - 143			
	13C12-1234789-HpCDF	84	26 - 138			
	13C12-OCDF	88	17 - 157			
	13C12-1278-TCDD (CRS)	87	35 - 197			

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169034
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2904 SDG#: DX029-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 01:18	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169035
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

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14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2905 SDG#: DX029-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169035
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2905 SDG#: DX029-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0412 U	0.0412	1.06	1
11031	12378-PeCDD	40321-76-4	0.219 JBQ	0.0464	5.31	1
11031	123478-HxCDD	39227-28-6	0.226 JBQ	0.0497	5.31	1
11031	123678-HxCDD	57653-85-7	0.776 JB	0.0508	5.31	1
11031	123789-HxCDD	19408-74-3	0.401 JB	0.0518	5.31	1
11031	1234678-HpCDD	35822-46-9	15.8 B	0.0505	5.31	1
11031	OCDD	3268-87-9	153 B	0.0494	10.6	1
11031	2378-TCDF	51207-31-9	0.0670 U	0.0670	1.06	1
11031	12378-PeCDF	57117-41-6	0.152 JBQ	0.0305	5.31	1
11031	23478-PeCDF	57117-31-4	0.266 JBQ	0.0251	5.31	1
11031	123478-HxCDF	70648-26-9	0.166 JBQ	0.0350	5.31	1
11031	123678-HxCDF	57117-44-9	0.177 JBQ	0.0299	5.31	1
11031	123789-HxCDF	72918-21-9	0.0960 JB	0.0369	5.31	1
11031	234678-HxCDF	60851-34-5	0.226 JBQ	0.0338	5.31	1
11031	1234678-HpCDF	67562-39-4	2.37 JB	0.0340	5.31	1
11031	1234789-HpCDF	55673-89-7	0.213 JB	0.0454	5.31	1
11031	OCDF	39001-02-0	5.17 JB	0.0334	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	89	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	88	26 - 138
13C12-OCDF	86	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169035
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2905 SDG#: DX029-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169035
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2905 SDG#: DX029-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	02/07/2011 21:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169036
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2906 SDG#: DX029-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	19.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169036
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2906 SDG#: DX029-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0794 JQ	0.0486	1.25	1
11031	12378-PeCDD	40321-76-4	0.0831 U	0.0831	6.24	1
11031	123478-HxCDD	39227-28-6	0.375 JB	0.0876	6.24	1
11031	123678-HxCDD	57653-85-7	1.69 JB	0.0875	6.24	1
11031	123789-HxCDD	19408-74-3	1.51 JB	0.0883	6.24	1
11031	1234678-HpCDD	35822-46-9	29.0 B	0.0773	6.24	1
11031	OCDD	3268-87-9	259 B	0.0858	12.5	1
11031	2378-TCDF	51207-31-9	1.10 J	0.147	1.25	1
11031	12378-PeCDF	57117-41-6	1.38 JB	0.0592	6.24	1
11031	23478-PeCDF	57117-31-4	1.28 JB	0.0603	6.24	1
11031	123478-HxCDF	70648-26-9	0.544 JB	0.0714	6.24	1
11031	123678-HxCDF	57117-44-9	0.594 JB	0.0659	6.24	1
11031	123789-HxCDF	72918-21-9	1.03 JB	0.0748	6.24	1
11031	234678-HxCDF	60851-34-5	0.615 JB	0.0695	6.24	1
11031	1234678-HpCDF	67562-39-4	4.64 JB	0.0543	6.24	1
11031	1234789-HpCDF	55673-89-7	0.395 JBQ	0.0760	6.24	1
11031	OCDF	39001-02-0	9.52 JB	0.0597	12.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	83	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169036
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2906 SDG#: DX029-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169036
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2906 SDG#: DX029-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 06:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169037
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2907 SDG#: DX029-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169037
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2907 SDG#: DX029-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0787 J	0.0567	1.14	1
11031	12378-PeCDD	40321-76-4	0.0919 U	0.0919	5.69	1
11031	123478-HxCDD	39227-28-6	0.500 JB	0.0714	5.69	1
11031	123678-HxCDD	57653-85-7	1.56 JB	0.0747	5.69	1
11031	123789-HxCDD	19408-74-3	1.21 JB	0.0709	5.69	1
11031	1234678-HpCDD	35822-46-9	27.7 B	0.0706	5.69	1
11031	OCDD	3268-87-9	236 B	0.0587	11.4	1
11031	2378-TCDF	51207-31-9	1.74	0.154	1.14	1
11650	2378-TCDF-Conf	51207-31-9	1.76 B	0.0584	1.14	1
11031	12378-PeCDF	57117-41-6	11.7 B	0.0613	5.69	1
11031	23478-PeCDF	57117-31-4	1.66 JB	0.0580	5.69	1
11031	123478-HxCDF	70648-26-9	1.12 JB	0.0610	5.69	1
11031	123678-HxCDF	57117-44-9	1.03 JB	0.0576	5.69	1
11031	123789-HxCDF	72918-21-9	0.563 JB	0.0625	5.69	1
11031	234678-HxCDF	60851-34-5	0.673 JB	0.0596	5.69	1
11031	1234678-HpCDF	67562-39-4	4.60 JB	0.0356	5.69	1
11031	1234789-HpCDF	55673-89-7	0.421 JBQ	0.0485	5.69	1
11031	OCDF	39001-02-0	4.93 JB	0.0487	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-2378-TCDF-Conf	71	24 - 169
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	80	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169037
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2907 SDG#: DX029-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169037
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2907 SDG#: DX029-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 07:11	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11012001	02/06/2011 15:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169038
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2908 SDG#: DX029-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	19.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169038
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2908 SDG#: DX029-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0360 U	0.0360	1.24	1
11031	12378-PeCDD	40321-76-4	0.209 JBQ	0.0458	6.19	1
11031	123478-HxCDD	39227-28-6	0.231 JB	0.0691	6.19	1
11031	123678-HxCDD	57653-85-7	0.850 JB	0.0715	6.19	1
11031	123789-HxCDD	19408-74-3	0.590 JB	0.0725	6.19	1
11031	1234678-HpCDD	35822-46-9	21.9 B	0.0610	6.19	1
11031	OCDD	3268-87-9	240 B	0.0682	12.4	1
11031	2378-TCDF	51207-31-9	0.0552 U	0.0552	1.24	1
11031	12378-PeCDF	57117-41-6	0.480 JB	0.0295	6.19	1
11031	23478-PeCDF	57117-31-4	0.283 JB	0.0295	6.19	1
11031	123478-HxCDF	70648-26-9	0.525 JB	0.0557	6.19	1
11031	123678-HxCDF	57117-44-9	0.521 JB	0.0485	6.19	1
11031	123789-HxCDF	72918-21-9	0.224 JB	0.0624	6.19	1
11031	234678-HxCDF	60851-34-5	0.660 JB	0.0548	6.19	1
11031	1234678-HpCDF	67562-39-4	17.4 B	0.0458	6.19	1
11031	1234789-HpCDF	55673-89-7	0.825 JB	0.0632	6.19	1
11031	OCDF	39001-02-0	52.6 B	0.0569	12.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	71	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169038
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2908 SDG#: DX029-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169038
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 02/24/2011 22:38

Chantilly VA 20151

X2908 SDG#: DX029-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 08:08	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1



Analysis Report

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Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169039
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2909 SDG#: DX029-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169039
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2909 SDG#: DX029-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0567 U	0.0567	1.09	1
11031	12378-PeCDD	40321-76-4	0.118 JBQ	0.0466	5.47	1
11031	123478-HxCDD	39227-28-6	0.0465 JBQ	0.0371	5.47	1
11031	123678-HxCDD	57653-85-7	0.144 JB	0.0374	5.47	1
11031	123789-HxCDD	19408-74-3	0.182 JBQ	0.0373	5.47	1
11031	1234678-HpCDD	35822-46-9	1.02 JB	0.0686	5.47	1
11031	OCDD	3268-87-9	13.4 B	0.0501	10.9	1
11031	2378-TCDF	51207-31-9	0.0693 JQ	0.0575	1.09	1
11031	12378-PeCDF	57117-41-6	0.125 JB	0.0292	5.47	1
11031	23478-PeCDF	57117-31-4	0.140 JBQ	0.0282	5.47	1
11031	123478-HxCDF	70648-26-9	0.144 JBQ	0.0359	5.47	1
11031	123678-HxCDF	57117-44-9	0.124 JBQ	0.0329	5.47	1
11031	123789-HxCDF	72918-21-9	0.263 JB	0.0397	5.47	1
11031	234678-HxCDF	60851-34-5	0.192 JBQ	0.0353	5.47	1
11031	1234678-HpCDF	67562-39-4	0.645 JB	0.0303	5.47	1
11031	1234789-HpCDF	55673-89-7	0.0727 JBQ	0.0385	5.47	1
11031	OCDF	39001-02-0	0.785 JB	0.0617	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	78	17 - 157
13C12-1278-TCDD (CRS)	89	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169039
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2909 SDG#: DX029-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169039
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 02/24/2011 22:38

Chantilly VA 20151

X2909 SDG#: DX029-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 09:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169040
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2910 SDG#: DX029-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169040
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2910 SDG#: DX029-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0503 U	0.0503	1.10	1
11031	12378-PeCDD	40321-76-4	0.0462 U	0.0462	5.48	1
11031	123478-HxCDD	39227-28-6	0.0353 JBQ	0.0318	5.48	1
11031	123678-HxCDD	57653-85-7	0.0973 JBQ	0.0345	5.48	1
11031	123789-HxCDD	19408-74-3	0.146 JBQ	0.0323	5.48	1
11031	1234678-HpCDD	35822-46-9	0.415 JB	0.0482	5.48	1
11031	OCDD	3268-87-9	1.60 JB	0.0475	11.0	1
11031	2378-TCDF	51207-31-9	0.0826 JQ	0.0508	1.10	1
11031	12378-PeCDF	57117-41-6	0.0757 JB	0.0255	5.48	1
11031	23478-PeCDF	57117-31-4	0.0842 JB	0.0244	5.48	1
11031	123478-HxCDF	70648-26-9	0.0919 JB	0.0283	5.48	1
11031	123678-HxCDF	57117-44-9	0.0951 JBQ	0.0254	5.48	1
11031	123789-HxCDF	72918-21-9	0.152 JBQ	0.0304	5.48	1
11031	234678-HxCDF	60851-34-5	0.142 JB	0.0280	5.48	1
11031	1234678-HpCDF	67562-39-4	0.469 JB	0.0237	5.48	1
11031	1234789-HpCDF	55673-89-7	0.0590 JB	0.0308	5.48	1
11031	OCDF	39001-02-0	0.331 JBQ	0.0484	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	96	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	90	26 - 138
13C12-OCDF	89	17 - 157
13C12-1278-TCDD (CRS)	95	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169040
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2910 SDG#: DX029-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169040
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 02/24/2011 22:38

Chantilly VA 20151

X2910 SDG#: DX029-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 10:01	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1



Analysis Report

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Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169041
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2911 SDG#: DX029-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169041
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2911 SDG#: DX029-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0523 U	0.0523	1.19	1
11031	12378-PeCDD	40321-76-4	0.0484 U	0.0484	5.97	1
11031	123478-HxCDD	39227-28-6	0.0381 U	0.0381	5.97	1
11031	123678-HxCDD	57653-85-7	0.0948 JB	0.0387	5.97	1
11031	123789-HxCDD	19408-74-3	0.109 JB	0.0370	5.97	1
11031	1234678-HpCDD	35822-46-9	0.625 JB	0.0600	5.97	1
11031	OCDD	3268-87-9	2.34 JB	0.0472	11.9	1
11031	2378-TCDF	51207-31-9	0.0688 U	0.0688	1.19	1
11031	12378-PeCDF	57117-41-6	0.0767 JBQ	0.0294	5.97	1
11031	23478-PeCDF	57117-31-4	0.135 JB	0.0307	5.97	1
11031	123478-HxCDF	70648-26-9	0.130 JBQ	0.0276	5.97	1
11031	123678-HxCDF	57117-44-9	0.0748 JB	0.0243	5.97	1
11031	123789-HxCDF	72918-21-9	0.217 JBQ	0.0329	5.97	1
11031	234678-HxCDF	60851-34-5	0.127 JBQ	0.0270	5.97	1
11031	1234678-HpCDF	67562-39-4	0.454 JB	0.0231	5.97	1
11031	1234789-HpCDF	55673-89-7	0.0894 JB	0.0309	5.97	1
11031	OCDF	39001-02-0	0.399 JBQ	0.0613	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	88	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169041
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2911 SDG#: DX029-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169041
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 02/24/2011 22:38

Chantilly VA 20151

X2911 SDG#: DX029-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 10:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1



Analysis Report

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Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169042
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2912 SDG#: DX029-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169042
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2912 SDG#: DX029-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0449 U	0.0449	1.14	1
11031	12378-PeCDD	40321-76-4	0.0821 JB	0.0636	5.71	1
11031	123478-HxCDD	39227-28-6	0.0402 U	0.0402	5.71	1
11031	123678-HxCDD	57653-85-7	0.286 JB	0.0412	5.71	1
11031	123789-HxCDD	19408-74-3	0.441 JB	0.0402	5.71	1
11031	1234678-HpCDD	35822-46-9	0.797 JB	0.0628	5.71	1
11031	OCDD	3268-87-9	4.41 JB	0.0505	11.4	1
11031	2378-TCDF	51207-31-9	0.0594 U	0.0594	1.14	1
11031	12378-PeCDF	57117-41-6	0.0816 JBQ	0.0295	5.71	1
11031	23478-PeCDF	57117-31-4	0.138 JBQ	0.0299	5.71	1
11031	123478-HxCDF	70648-26-9	0.0812 JB	0.0354	5.71	1
11031	123678-HxCDF	57117-44-9	0.0979 JBQ	0.0318	5.71	1
11031	123789-HxCDF	72918-21-9	0.301 JB	0.0394	5.71	1
11031	234678-HxCDF	60851-34-5	0.151 JBQ	0.0345	5.71	1
11031	1234678-HpCDF	67562-39-4	0.491 JB	0.0225	5.71	1
11031	1234789-HpCDF	55673-89-7	0.0860 JB	0.0322	5.71	1
11031	OCDF	39001-02-0	0.458 JBQ	0.0551	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	66	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169042
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2912 SDG#: DX029-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169042
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

CDM Federal Programs Corp.

Submitted: 12/18/2010 12:40

14420 Albemarle Point Place

Reported: 02/24/2011 22:38

Suite 210

Chantilly VA 20151

X2912 SDG#: DX029-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 11:54	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169043
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2913 SDG#: DX029-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	11.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169043
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2913 SDG#: DX029-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0396 U	0.0396	1.12	1
11031	12378-PeCDD	40321-76-4	0.0710 JBQ	0.0445	5.62	1
11031	123478-HxCDD	39227-28-6	0.0382 JBQ	0.0290	5.62	1
11031	123678-HxCDD	57653-85-7	0.0518 JBQ	0.0292	5.62	1
11031	123789-HxCDD	19408-74-3	0.0290 U	0.0290	5.62	1
11031	1234678-HpCDD	35822-46-9	0.324 JB	0.0399	5.62	1
11031	OCDD	3268-87-9	1.25 JB	0.0466	11.2	1
11031	2378-TCDF	51207-31-9	0.0364 U	0.0364	1.12	1
11031	12378-PeCDF	57117-41-6	0.0306 JB	0.0214	5.62	1
11031	23478-PeCDF	57117-31-4	0.0833 JB	0.0217	5.62	1
11031	123478-HxCDF	70648-26-9	0.0737 JBQ	0.0201	5.62	1
11031	123678-HxCDF	57117-44-9	0.0466 JB	0.0181	5.62	1
11031	123789-HxCDF	72918-21-9	0.0703 JBQ	0.0229	5.62	1
11031	234678-HxCDF	60851-34-5	0.117 JB	0.0202	5.62	1
11031	1234678-HpCDF	67562-39-4	0.422 JB	0.0181	5.62	1
11031	1234789-HpCDF	55673-89-7	0.0561 JBQ	0.0252	5.62	1
11031	OCDF	39001-02-0	0.430 JBQ	0.0520	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	69	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169043
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2913 SDG#: DX029-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169043
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 02/24/2011 22:38

Chantilly VA 20151

X2913 SDG#: DX029-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 12:51	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169044
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2914 SDG#: DX029-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169044
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2914 SDG#: DX029-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0404 U	0.0404	1.09	1
11031	12378-PeCDD	40321-76-4	0.0558 JBQ	0.0381	5.46	1
11031	123478-HxCDD	39227-28-6	0.0301 U	0.0301	5.46	1
11031	123678-HxCDD	57653-85-7	0.0607 JBQ	0.0324	5.46	1
11031	123789-HxCDD	19408-74-3	0.0935 JBQ	0.0308	5.46	1
11031	1234678-HpCDD	35822-46-9	0.293 JB	0.0418	5.46	1
11031	OCDD	3268-87-9	1.26 JB	0.0464	10.9	1
11031	2378-TCDF	51207-31-9	0.0424 U	0.0424	1.09	1
11031	12378-PeCDF	57117-41-6	0.0518 JBQ	0.0203	5.46	1
11031	23478-PeCDF	57117-31-4	0.108 JBQ	0.0202	5.46	1
11031	123478-HxCDF	70648-26-9	0.0869 JBQ	0.0237	5.46	1
11031	123678-HxCDF	57117-44-9	0.0610 JB	0.0226	5.46	1
11031	123789-HxCDF	72918-21-9	0.0646 JBQ	0.0262	5.46	1
11031	234678-HxCDF	60851-34-5	0.160 JBQ	0.0230	5.46	1
11031	1234678-HpCDF	67562-39-4	0.425 JB	0.0195	5.46	1
11031	1234789-HpCDF	55673-89-7	0.0481 JBQ	0.0246	5.46	1
11031	OCDF	39001-02-0	0.365 JB	0.0471	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169044
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/18/2010 12:40

Reported: 02/24/2011 22:38

X2914 SDG#: DX029-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169044
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/18/2010 12:40

Suite 210

Reported: 02/24/2011 22:38

Chantilly VA 20151

X2914 SDG#: DX029-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 13:48	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/24/11 at 10:38 PM

Group Number: 1226240

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10354162401B 28a Moisture Content by 160.3	Sample number(s): 6169031,6169034-6169038				100		80-120		
Batch number: 11011162401A 28a Moisture Content by 160.3	Sample number(s): 6169039-6169044				100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 10362001	Sample number(s): 6169032-6169033								
2378-TCDD	2.81	1.76	2.00	pg/l	89		67-158		
12378-PeCDD	0.684 J	0.492	10.0	pg/l	96		70-142		
123478-HxCDD	0.485 J	0.235	10.0	pg/l	106		70-164		
123678-HxCDD	0.512 J	0.243	10.0	pg/l	104		76-134		
123789-HxCDD	0.483 J	0.269	10.0	pg/l	106		64-162		
1234678-HpCDD	1.35 J	0.246	10.0	pg/l	108		70-140		
OCDD	2.39 J	0.274	20.0	pg/l	118		78-144		
2378-TCDF	0.181 J	0.166	2.00	pg/l	95		75-158		
12378-PeCDF	0.474 J	0.125	10.0	pg/l	104		80-134		
23478-PeCDF	0.810 J	0.113	10.0	pg/l	102		68-160		
123478-HxCDF	0.599 J	0.136	10.0	pg/l	111		72-134		
123678-HxCDF	0.568 J	0.132	10.0	pg/l	113		84-130		
123789-HxCDF	0.637 J	0.143	10.0	pg/l	111		78-130		
234678-HxCDF	0.505 J	0.136	10.0	pg/l	109		70-156		
1234678-HpCDF	1.41 J	0.122	10.0	pg/l	116		82-122		
1234789-HpCDF	0.582 J	0.148	10.0	pg/l	117		78-138		
OCDF	1.43 J	0.269	20.0	pg/l	122		63-170		
Batch number: 11012001	Sample number(s): 6169031,6169034-6169044								
2378-TCDD	0.0393 U	0.0393	1.00	ng/kg	102		67-158		
12378-PeCDD	0.199 J	0.0435	5.00	ng/kg	101		70-142		
123478-HxCDD	0.147 J	0.0378	5.00	ng/kg	99		70-164		
123678-HxCDD	0.162 J	0.0378	5.00	ng/kg	101		76-134		
123789-HxCDD	0.167 J	0.0372	5.00	ng/kg	98		64-162		
1234678-HpCDD	0.437 J	0.0525	5.00	ng/kg	100		70-140		
OCDD	1.37 J	0.0491	10.0	ng/kg	100		78-144		
2378-TCDF	0.0396 U	0.0396	1.00	ng/kg	106		75-158		
2378-TCDF-Conf	0.0679 J	0.0199	1.00	ng/kg					
12378-PeCDF	0.199 J	0.0246	5.00	ng/kg	99		80-134		
23478-PeCDF	0.230 J	0.0245	5.00	ng/kg	101		68-160		
123478-HxCDF	0.209 J	0.0352	5.00	ng/kg	99		72-134		
123678-HxCDF	0.226 J	0.0317	5.00	ng/kg	98		84-130		
123789-HxCDF	0.206 J	0.0395	5.00	ng/kg	98		78-130		
234678-HxCDF	0.207 J	0.0339	5.00	ng/kg	98		70-156		
1234678-HpCDF	1.49 J	0.0429	5.00	ng/kg	97		82-122		
1234789-HpCDF	0.200 J	0.0602	5.00	ng/kg	98		78-138		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/24/11 at 10:38 PM

Group Number: 1226240

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
OCDF	0.495 J	0.0525	10.0	ng/kg	99		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10354162401B 28a Moisture Content by 160.3	Sample number(s): 6169031, 6169034-6169038 BKG: P158227 12.4 12.9 3 20								
Batch number: 11011162401A 28a Moisture Content by 160.3	Sample number(s): 6169039-6169044 BKG: P167523 9.7 9.7 0 20								
Batch number: 11012001	Sample number(s): 6169031, 6169034-6169044 UNSPK: P172048								
2378-TCDD	106	105	67-158	1	25				
12378-PeCDD	106	104	70-142	2	25				
123478-HxCDD	106	101	70-164	5	25				
123678-HxCDD	102	102	76-134	0	25				
123789-HxCDD	103	99	64-162	5	25				
1234678-HpCDD	104	100	70-140	4	25				
OCDD	110	100	78-144	8	25				
2378-TCDF	115	108	75-158	6	25				
12378-PeCDF	103	102	80-134	2	25				
23478-PeCDF	105	102	68-160	3	25				
123478-HxCDF	103	99	72-134	4	25				
123678-HxCDF	103	100	84-130	3	25				
123789-HxCDF	102	98	78-130	5	25				
234678-HxCDF	102	100	70-156	2	25				
1234678-HpCDF	102	99	82-122	3	25				
1234789-HpCDF	102	99	78-138	3	25				
OCDF	105	103	63-170	2	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 10362001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6169032	4*	58	49	48	52	53
6169033	16*	67	61	60	63	66
Blank	6*	70	67	66	66	69
OPR	10*	63	56	55	57	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/24/11 at 10:38 PM

Group Number: 1226240

Surrogate Quality Control

6169032	52	53	49	8*	27	45
6169033	63	63	58	21*	48	59
Blank	64	61	54	11*	32	58
OPR	55	54	48	17*	37	52

Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF

6169032	43	40	52	51	46	52
6169033	56	56	64	60	52	63
Blank	54	49	63	55	57	68
OPR	50	46	56	48	51	60

Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11012001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF

6169031	85	89	79	83	80	85
6169034	75	83	77	79	77	79
6169035	66	78	68	78	74	79
6169036	70	79	74	78	75	86
6169037	73	79	76	78	76	85
6169038	67	74	67	72	67	71
6169039	69	79	72	75	73	77
6169040	71	90	79	84	78	85
6169041	70	80	71	78	71	72
6169042	67	71	67	73	67	73
6169043	68	77	71	78	72	77
6169044	69	77	69	72	70	77
Blank	76	80	76	82	78	83
MS	66	76	70	74	70	70
MSD	85	96	85	90	87	99
OPR	73	72	73	77	74	80

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

6169031	94	89	91	94	91	87
6169034	85	84	88	87	83	83
6169035	89	88	86	80	77	85
6169036	87	83	83	87	80	81
6169037	84	81	80	91	80	79
6169038	80	72	71	86	74	74
6169039	85	80	78	89	78	77
6169040	95	90	89	95	88	87
6169041	88	77	75	88	82	78
6169042	81	70	66	85	72	74
6169043	85	75	69	86	79	79
6169044	75	75	72	85	77	74
Blank	96	86	83	95	83	85
MS	84	75	73	82	77	75

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/24/11 at 10:38 PM

Group Number: 1226240

Surrogate Quality Control

MSD	101	97	93	97	96	92
OPR	90	79	75	89	77	81
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6169031	86	88	99	108	82	91
6169034	82	82	94	104	77	82
6169035	89	81	84	89	62	68
6169036	80	79	88	89	73	82
6169037	81	79	86	85	76	81
6169038	72	72	79	78	69	78
6169039	77	76	85	84	72	79
6169040	84	85	96	96	78	89
6169041	77	79	86	86	72	84
6169042	73	73	77	75	70	76
6169043	77	79	82	79	71	81
6169044	72	73	77	76	71	78
Blank	86	86	96	95	75	83
MS	76	75	81	82	68	78
MSD	93	94	102	102	86	98
OPR	81	81	89	86	71	75
Limits:	28-130	28-130	23-140	17-157	24-169	24-185
	13C12-2378-TCDF-Conf					
6169031	70					
6169034						
6169035						
6169036						
6169037	71					
6169038						
6169039						
6169040						
6169041						
6169042						
6169043						
6169044						
Blank	78					
MS						
MSD						
OPR						
Limits:	24-169					

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

acct #13013 Cup #1226240

sample # 6169031-44

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD																Other Instructions and Notes									
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8160B	1,4-Dioxane EPA 8260B	SVCs EPA 8270C & PAHs EPA 8270 SIM	TPH-GRO EPA 8012B	TPH-EPI EPA 8015B Mod.	*Metals EPA 6010/6010B/2471A	*Hex Chlorine EPA 7299*	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1631B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 8950	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrate EPA 900.0	**Formaldehyde EPA 8151A		**Pb-MDMA EPA 1623C	**Benzene EPA 8000A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B		
DUP08-SASB-QC-121710	12.17.10	1407	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										surface soil DUP
EB05-SASB-121710	12.17.10	1235	water	none	6-1 liter ambers																										surface tool rinse
EB05-SASB-121710	12.17.10	1235	water	none	1-500 ml poly																										surface tool rinse
EB05-SASB-121710	12.17.10	1235	water	HNO3	1-500 ml poly																										surface tool rinse
EB01-SIV-121710	12.17.10	1235	water	none	6-1 liter ambers																										sediment tool rinse
EB01-SIV-121710	12.17.10	1235	water	none	1-500 ml poly																										sediment tool rinse
EB01-SIV-121710	12.17.10	1235	water	HNO3	1-500 ml poly																										sediment tool rinse
SED-014-SIV-SD-0.0-0.5	12.17.10	0844	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SED-012-SIV-SD-0.0-0.5	12.17.10	1024	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SED-006-SIV-SD-0.0-0.5	12.17.10	1525	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SED-001-SIV-SD-0.0-0.5	12.17.10	1241	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SED-004-SIV-SD-0.0-0.5	12.17.10	1142	soil	none	1 x 16 oz. jar & 1 1/2" sleeves																										
SL-282-SASB-SB-4.0-5.0	12.17.10	1020	soil	none	4 16 oz. jars																										
SL-282-SASB-SB-4.5	12.17.10	1015	soil	none	5 Encore Samplers																										
SL-282-SASB-SB-7.5	12.17.10	1024	soil	none	5 Encore Samplers																										
SL-282-SASB-SB-7.0-8.0	12.17.10	1028	soil	none	4 16 oz. jars																										
SL-281-SASB-SB-4.0-5.0	12.17.10	1230	soil	none	4 16 oz. jars																										
SL-281-SASB-SB-4.5	12.17.10	1225	soil	none	5 Encore Samplers																										
SL-281-SASB-SB-8.0-9.0	12.17.10	1237	soil	none	4 16 oz. jars																										
SL-281-SASB-SB-8.5	12.17.10	1233	soil	none	5 Encore Samplers																										
SL-026-SASB-4.0-5.0	12.17.10	1508	soil	none	4 16 oz. jars																										
SL-026-SASB-4.5	12.17.10	1503	soil	none	5 Encore Samplers																										
SL-026-SASB-9.0-10	12.17.10	1519	soil	none	4 16 oz. jars																										
SL-026-SASB-9.5	12.17.10	1513	soil	none	5 Encore Samplers																										
SL-207-SASB-SS-0.0-0.5	12.17.10	1110	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-208-SASB-SS-0.0-0.5	12.17.10	1053	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-276-SASB-SS-0.0-0.5	12.17.10	0930	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-210-SASB-SS-0.0-0.5	12.17.10	1128	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-275-SASB-SS-0.0-0.5	12.17.10	0945	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-206-SASB-SS-0.0-0.5	12.17.10	1010	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-209-SASB-SS-0.0-0.5	12.17.10	1142	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-161-SASB-SS-0.0-0.5	12.17.10	1004	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-162-SASB-SS-0.0-0.5	12.17.10	0942	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-274-SASB-SS-0.0-0.5	12.17.10	1128	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-166-SASB-SS-0.0-0.5	12.17.10	1108	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-160-SASB-SS-0.0-0.5	12.17.10	1122	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-211-SASB-SS-0.0-0.5MS	12.17.10	1402	soil	none	2 x 16 oz. jars & 2 1/2" sleeves																										
SL-278-SASB-SS-0.0-0.5	12.17.10	1411	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-279-SASB-SS-0.0-0.5	12.17.10	1428	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-277-SASB-SS-0.0-0.5	12.17.10	1355	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-273-SASB-SS-0.0-0.5	12.17.10	1420	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
SL-272-SASB-SS-0.0-0.5	12.17.10	1440	soil	none	1 x 16 oz. jar & 1 1/2" sleeve																										
TB-121710	12.17.10	0800	water	HCl	4-40 mL clear VOA vials																										
Date/Time: 12.17.10 1700 Received at Lab: [Signature] Date/Time: 12/18/10 1240 AirMail No. 00732992						Laboratory: Lancaster Laboratories, Inc. No. of coolers: 5																									

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/22/2010
Group Number: 1226677
SDG: DE046
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
DUP01-SIV-QC-122010 Soil	6172036
SED-003-SIV-SD-0.0-0.5 Soil	6172037
SED-005-SIV-SD-0.0-0.5 Soil	6172038
SED-005-SIV-SD-0.0-0.5MS Soil	6172039
SED-005-SIV-SD-0.0-0.5MSD Soil	6172040
SED-005-SIV-SD-0.0-0.5DUP Soil	6172041
SED-007-SIV-SD-0.0-0.6 Soil	6172042
SED-008-SIV-SD-0.0-0.5 Soil	6172043
SED-034-SIV-SD-0.0-0.5 Soil	6172044
SED-037-SIV-SD-0.0-0.5 Soil	6172045

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO
1 COPY TO CDM Federal Services Program
Data Package Group

Attn: Todd Burgesser

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Martha L. Seidel
Senior Chemist

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

DUP01 SDG#: DE046-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U 210	630	1
04688	Benzidine	92-87-5	1,500	U 1,500	4,200	1
04688	Benzoic acid	65-85-0	210	U 210	630	1
04688	Benzyl alcohol	100-51-6	210	U 210	630	1
04688	4-Bromophenyl-phenylether	101-55-3	21	U 21	210	1
04688	Carbazole	86-74-8	21	U 21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	42	U 42	210	1
04688	4-Chloroaniline	106-47-8	84	U 84	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U 21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U 21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U 21	210	1
04688	2-Chloronaphthalene	91-58-7	21	U 21	210	1
04688	2-Chlorophenol	95-57-8	21	U 21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	42	U 42	210	1
04688	Dibenzofuran	132-64-9	21	U 21	210	1
04688	1,2-Dichlorobenzene	95-50-1	21	U 21	210	1
04688	1,3-Dichlorobenzene	541-73-1	21	U 21	210	1
04688	1,4-Dichlorobenzene	106-46-7	21	U 21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U 130	420	1
04688	2,4-Dichlorophenol	120-83-2	21	U 21	210	1
04688	2,4-Dimethylphenol	105-67-9	42	U 42	210	1
04688	3,5-Dimethylphenol	108-68-9	42	U 42	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U 210	630	1
04688	2,4-Dinitrophenol	51-28-5	840	U 840	2,500	1
04688	2,4-Dinitrotoluene	121-14-2	42	U 42	210	1
04688	2,6-Dinitrotoluene	606-20-2	21	U 21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	21	U 21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	22	J 21	420	1
04688	Hexachlorobenzene	118-74-1	21	U 21	210	1
04688	Hexachlorobutadiene	87-68-3	84	U 84	210	1
04688	Hexachlorocyclopentadiene	77-47-4	210	U 210	630	1
04688	Hexachloroethane	67-72-1	21	U 21	210	1
04688	Isophorone	78-59-1	21	U 21	210	1
04688	2-Methylphenol	95-48-7	42	U 42	210	1
04688	4-Methylphenol	106-44-5	42	U 42	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	21	U 21	210	1
04688	3-Nitroaniline	99-09-2	42	U 42	210	1
04688	4-Nitroaniline	100-01-6	84	U 84	210	1
04688	Nitrobenzene	98-95-3	21	U 21	210	1
04688	2-Nitrophenol	88-75-5	21	U 21	210	1
04688	4-Nitrophenol	100-02-7	210	U 210	630	1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U 21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	21	U 21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	210	U 210	630	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

DUP01 SDG#: DE046-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	21 U	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	21 U	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	42 U	42	210	1
04688	2,4,6-Trichlorophenol	88-06-2	42 U	42	210	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.84 U	0.84	2.1	1
10138	Acenaphthylene	208-96-8	0.42 U	0.42	2.1	1
10138	Anthracene	120-12-7	0.42 U	0.42	2.1	1
10138	Benzo(a)anthracene	56-55-3	0.84 U	0.84	2.1	1
10138	Benzo(a)pyrene	50-32-8	0.84 U	0.84	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	0.84 U	0.84	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	0.84 U	0.84	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	0.84 U	0.84	2.1	1
10138	Butylbenzylphthalate	85-68-7	7.6 U	7.6	23	1
10138	Di-n-butylphthalate	84-74-2	7.6 U	7.6	23	1
10138	Chrysene	218-01-9	0.71 J	0.42	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	0.84 U	0.84	2.1	1
10138	Diethylphthalate	84-66-2	7.6 U	7.6	23	1
10138	Dimethylphthalate	131-11-3	7.6 U	7.6	23	1
10138	Fluoranthene	206-44-0	0.84 U	0.84	2.1	1
10138	Fluorene	86-73-7	0.84 U	0.84	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.84 U	0.84	2.1	1
10138	1-Methylnaphthalene	90-12-0	0.84 U	0.84	2.1	1
10138	2-Methylnaphthalene	91-57-6	0.84 U	0.84	2.1	1
10138	Naphthalene	91-20-3	0.84 U	0.84	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	0.84 U	0.84	2.1	1
10138	Di-n-octylphthalate	117-84-0	7.6 U	7.6	23	1
10138	Phenanthrene	85-01-8	0.85 J	0.84	2.1	1
10138	Pyrene	129-00-0	0.84 U	0.84	2.1	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.5 U	1.5	4.5	1
10401	Dalapon	75-99-0	5.6 U	5.6	11	1
10401	2,4-DB	94-82-6	5.8 U	5.8	5.8	1
10401	Dicamba	1918-00-9	0.51 U	0.51	1.5	1
10401	Dinoseb	88-85-7	1.0 U	1.0	3.0	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0 U	1.0	2.1	1
10401	MCPA	94-74-6	96 U	96	320	1
10401	MCPP (Mecoprop)	93-65-2	95 U	95	320	1
10401	2,4,5-T	93-76-5	0.10 U	0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.18 J	0.095	0.21	1

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.

Pesticides/PCBs **SW-846 8081A** **ug/kg** **ug/kg** **ug/kg**

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

DUP01 SDG#: DE046-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.083 U	0.083	0.21	1
01363	Alpha BHC	319-84-6	0.043 U	0.043	0.21	1
01363	Beta BHC	319-85-7	0.076 U	0.076	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.043 U	0.043	0.21	1
01363	Chlordane	57-74-9	1.0 U	1.0	4.3	1
01363	p,p-DDD	72-54-8	0.48 U	0.48	0.48	1
01363	p,p-DDE	72-55-9	0.71	0.083	0.43	1
01363	p,p-DDT	50-29-3	0.86	0.083	0.43	1
01363	Delta BHC	319-86-8	0.045 U	0.045	0.21	1
01363	Dieldrin	60-57-1	0.12 U	0.12	0.43	1
01363	Endosulfan I	959-98-8	0.056 U	0.056	0.21	1
01363	Endosulfan II	33213-65-9	0.083 U	0.083	0.43	1
01363	Endosulfan Sulfate	1031-07-8	0.083 U	0.083	0.43	1
01363	Endrin	72-20-8	0.083 U	0.083	0.43	1
01363	Endrin Aldehyde	7421-93-4	0.27 J	0.083	0.43	1
01363	Endrin Ketone	53494-70-5	0.083 U	0.083	0.43	1
01363	Heptachlor	76-44-8	0.076 U	0.076	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.078 J	0.043	0.21	1
01363	Methoxychlor	72-43-5	0.43 U	0.43	2.1	1
01363	Mirex	2385-85-5	0.095 J	0.083	0.43	1
01363	Toxaphene	8001-35-2	2.8 U	2.8	8.3	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram, the values reported for dieldrin and endrin represent the lowest reporting limits attainable.

Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.3 U	1.3	4.2	1
10225	Aroclor 5442	12642-23-8	1.3 U	1.3	4.2	1
10225	Aroclor 5460	11126-42-4	1.3 U	1.3	4.2	1
10225	PCB-1016	12674-11-2	0.42 U	0.42	2.1	1
10225	PCB-1221	11104-28-2	0.63 U	0.63	2.1	1
10225	PCB-1232	11141-16-5	0.66 U	0.66	2.1	1
10225	PCB-1242	53469-21-9	0.63 U	0.63	2.1	1
10225	PCB-1248	12672-29-6	0.42 U	0.42	2.1	1
10225	PCB-1254	11097-69-1	0.42 U	0.42	2.1	1
10225	PCB-1260	11096-82-5	0.42 U	0.42	2.1	1
10225	PCB-1262	37324-23-5	0.42 U	0.42	2.1	1
10225	PCB-1268	11100-14-4	0.42 U	0.42	2.1	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,100	6.11	24.3	1
07914	Boron	7440-42-8	5.00 J	1.08	6.07	1
01650	Calcium	7440-70-2	2,620	7.44	24.3	1
01654	Iron	7439-89-6	18,600	5.72	24.3	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

DUP01 SDG#: DE046-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01656	Lithium	7439-93-2	22.7	0.27	2.4	1
01657	Magnesium	7439-95-4	4,410	3.08	12.1	1
06958	Manganese	7439-96-5	287	0.0947	0.607	1
10145	Phosphorus	7723-14-0	462	0.680	12.1	1
01662	Potassium	7440-09-7	3,130	21.9	60.7	1
01667	Sodium	7440-23-5	75.0 J	45.3	121	1
07968	Strontium	7440-24-6	16.2	0.0753	0.607	1
06969	Tin	7440-31-5	2.20 J	1.21	12.1	1
06970	Titanium	7440-32-6	1,090	0.461	1.21	1
10146	Zirconium	7440-67-7	1.20 J	1.02	6.07	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.134 J	0.0743	0.248	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.30	0.0743	0.495	2
06126	Barium	7440-39-3	122	0.134	0.495	2
06127	Beryllium	7440-41-7	0.646	0.0198	0.124	2
06128	Cadmium	7440-43-9	0.267	0.0446	0.124	2
06131	Chromium	7440-47-3	21.4	0.149	0.495	2
06132	Cobalt	7440-48-4	6.69	0.0248	0.124	2
06133	Copper	7440-50-8	10.4	0.0817	0.495	2
06135	Lead	7439-92-1	18.4	0.0129	0.248	2
06138	Molybdenum	7439-98-7	0.747	0.0619	0.124	2
06139	Nickel	7440-02-0	16.3	0.124	0.495	2
06141	Selenium	7782-49-2	0.183 J	0.0495	0.495	2
06142	Silver	7440-22-4	0.0727 J	0.0149	0.124	2
06145	Thallium	7440-28-0	0.366	0.0371	0.124	2
06148	Vanadium	7440-62-2	40.6	0.0272	0.124	2
06149	Zinc	7440-66-6	86.4	0.693	3.71	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0285 J	0.0036	0.125	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.3	1.0	1.3	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.4 U	11.4	37.9	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.37 J	0.25	1.3	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	541	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

DUP01 SDG#: DE046-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.		mV	mV	mV	
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	5.94	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	20.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 22:32	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 15:07	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/06/2011 21:54	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 22:26	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 20:31	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

DUP01 SDG#: DE046-01FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:40	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:02	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:02	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:06	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 01:02	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 02:43	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 16:04	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD003 SDG#: DE046-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	230	U 230	680	1
04688	Benzidine	92-87-5	1,600	U 1,600	4,500	1
04688	Benzoic acid	65-85-0	230	U 230	680	1
04688	Benzyl alcohol	100-51-6	230	U 230	680	1
04688	4-Bromophenyl-phenylether	101-55-3	23	U 23	230	1
04688	Carbazole	86-74-8	23	U 23	230	1
04688	4-Chloro-3-methylphenol	59-50-7	45	U 45	230	1
04688	4-Chloroaniline	106-47-8	90	U 90	230	1
04688	bis(2-Chloroethoxy)methane	111-91-1	23	U 23	230	1
04688	bis(2-Chloroethyl)ether	111-44-4	23	U 23	230	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	23	U 23	230	1
04688	2-Chloronaphthalene	91-58-7	23	U 23	230	1
04688	2-Chlorophenol	95-57-8	23	U 23	230	1
04688	4-Chlorophenyl-phenylether	7005-72-3	45	U 45	230	1
04688	Dibenzofuran	132-64-9	23	U 23	230	1
04688	1,2-Dichlorobenzene	95-50-1	23	U 23	230	1
04688	1,3-Dichlorobenzene	541-73-1	23	U 23	230	1
04688	1,4-Dichlorobenzene	106-46-7	23	U 23	230	1
04688	3,3'-Dichlorobenzidine	91-94-1	140	U 140	450	1
04688	2,4-Dichlorophenol	120-83-2	23	U 23	230	1
04688	2,4-Dimethylphenol	105-67-9	45	U 45	230	1
04688	3,5-Dimethylphenol	108-68-9	45	U 45	230	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	230	U 230	680	1
04688	2,4-Dinitrophenol	51-28-5	900	U 900	2,700	1
04688	2,4-Dinitrotoluene	121-14-2	45	U 45	230	1
04688	2,6-Dinitrotoluene	606-20-2	23	U 23	230	1
04688	1,2-Diphenylhydrazine	122-66-7	23	U 23	230	1
04688	Hexachlorobenzene	118-74-1	23	U 23	230	1
04688	Hexachlorobutadiene	87-68-3	90	U 90	230	1
04688	Hexachlorocyclopentadiene	77-47-4	230	U 230	680	1
04688	Hexachloroethane	67-72-1	23	U 23	230	1
04688	Isophorone	78-59-1	23	U 23	230	1
04688	2-Methylphenol	95-48-7	45	U 45	230	1
04688	4-Methylphenol	106-44-5	45	U 45	230	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	23	U 23	230	1
04688	3-Nitroaniline	99-09-2	45	U 45	230	1
04688	4-Nitroaniline	100-01-6	90	U 90	230	1
04688	Nitrobenzene	98-95-3	23	U 23	230	1
04688	2-Nitrophenol	88-75-5	23	U 23	230	1
04688	4-Nitrophenol	100-02-7	230	U 230	680	1
04688	N-Nitroso-di-n-propylamine	621-64-7	23	U 23	230	1
04688	N-Nitrosodiphenylamine	86-30-6	23	U 23	230	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	230	U 230	680	1
04688	Phenol	108-95-2	23	U 23	230	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD003 SDG#: DE046-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	23 U	23	230	1
04688	2,4,5-Trichlorophenol	95-95-4	45 U	45	230	1
04688	2,4,6-Trichlorophenol	88-06-2	45 U	45	230	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.90 U	0.90	2.3	1
10138	Acenaphthylene	208-96-8	0.45 U	0.45	2.3	1
10138	Anthracene	120-12-7	0.45 U	0.45	2.3	1
10138	Benzo(a)anthracene	56-55-3	0.90 U	0.90	2.3	1
10138	Benzo(a)pyrene	50-32-8	0.90 U	0.90	2.3	1
10138	Benzo(b)fluoranthene	205-99-2	1.9 J	0.90	2.3	1
10138	Benzo(g,h,i)perylene	191-24-2	1.0 J	0.90	2.3	1
10138	Benzo(k)fluoranthene	207-08-9	0.90 U	0.90	2.3	1
10138	Butylbenzylphthalate	85-68-7	17 J	8.1	24	1
10138	Di-n-butylphthalate	84-74-2	8.1 U	8.1	24	1
10138	Chrysene	218-01-9	7.1	0.45	2.3	1
10138	Dibenz(a,h)anthracene	53-70-3	0.90 U	0.90	2.3	1
10138	Diethylphthalate	84-66-2	8.1 U	8.1	24	1
10138	Dimethylphthalate	131-11-3	8.1 U	8.1	24	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	38	8.1	24	1
10138	Fluoranthene	206-44-0	1.5 J	0.90	2.3	1
10138	Fluorene	86-73-7	0.90 U	0.90	2.3	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.90 U	0.90	2.3	1
10138	1-Methylnaphthalene	90-12-0	0.90 U	0.90	2.3	1
10138	2-Methylnaphthalene	91-57-6	0.90 U	0.90	2.3	1
10138	Naphthalene	91-20-3	0.91 J	0.90	2.3	1
10138	N-Nitrosodimethylamine	62-75-9	0.90 U	0.90	2.3	1
10138	Di-n-octylphthalate	117-84-0	8.1 U	8.1	24	1
10138	Phenanthrene	85-01-8	1.3 J	0.90	2.3	1
10138	Pyrene	129-00-0	1.3 J	0.90	2.3	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.6 U	1.6	4.9	1
10401	Dalapon	75-99-0	6.0 U	6.0	12	1
10401	2,4-DB	94-82-6	0.92 U	0.92	2.3	1
10401	Dicamba	1918-00-9	0.54 U	0.54	1.6	1
10401	Dinoseb	88-85-7	1.1 U	1.1	3.2	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.1 U	1.1	2.3	1
10401	MCPA	94-74-6	340 J	100	340	1
10401	MCPP (Mecoprop)	93-65-2	220 J	100	340	1
10401	2,4,5-T	93-76-5	0.11 U	0.11	0.23	1
10401	2,4,5-TP	93-72-1	0.10 U	0.10	0.23	1
When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD003 SDG#: DE046-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.089 U	0.089	0.22	1
01363	Alpha BHC	319-84-6	0.046 U	0.046	0.22	1
01363	Beta BHC	319-85-7	0.081 U	0.081	0.22	1
01363	Gamma BHC - Lindane	58-89-9	0.058 J	0.046	0.22	1
01363	Chlordane	57-74-9	1.1 U	1.1	4.6	1
01363	p,p-DDD	72-54-8	0.22 U	0.22	0.46	1
01363	p,p-DDE	72-55-9	2.7 U	2.7	2.7	1
01363	p,p-DDT	50-29-3	11	0.45	2.3	5
01363	Delta BHC	319-86-8	0.049 U	0.049	0.22	1
01363	Dieldrin	60-57-1	0.93 U	0.93	0.93	1
01363	Endosulfan I	959-98-8	0.060 U	0.060	0.22	1
01363	Endosulfan II	33213-65-9	1.7 U	1.7	1.7	1
01363	Endosulfan Sulfate	1031-07-8	0.089 U	0.089	0.46	1
01363	Endrin	72-20-8	1.2	0.089	0.46	1
01363	Endrin Aldehyde	7421-93-4	0.80 U	0.80	0.80	1
01363	Endrin Ketone	53494-70-5	0.089 U	0.089	0.46	1
01363	Heptachlor	76-44-8	0.081 U	0.081	0.22	1
01363	Heptachlor Epoxide	1024-57-3	0.74 U	0.74	0.74	1
01363	Methoxychlor	72-43-5	0.46 U	0.46	2.2	1
01363	Mirex	2385-85-5	0.089 U	0.089	0.46	1
01363	Toxaphene	8001-35-2	3.0 U	3.0	8.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	6.8 U	6.8	22	5
10225	Aroclor 5442	12642-23-8	6.8 U	6.8	22	5
10225	Aroclor 5460	11126-42-4	6.8 U	6.8	22	5
10225	PCB-1016	12674-11-2	2.2 U	2.2	12	5
10225	PCB-1221	11104-28-2	3.4 U	3.4	12	5
10225	PCB-1232	11141-16-5	3.5 U	3.5	12	5
10225	PCB-1242	53469-21-9	3.4 U	3.4	12	5
10225	PCB-1248	12672-29-6	2.2 U	2.2	12	5
10225	PCB-1254	11097-69-1	63	2.2	12	5
10225	PCB-1260	11096-82-5	45	2.2	12	5
10225	PCB-1262	37324-23-5	2.2 U	2.2	12	5
10225	PCB-1268	11100-14-4	2.2 U	2.2	12	5

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,400	6.48	25.8	1
07914	Boron	7440-42-8	5.57 J	1.15	6.44	1
01650	Calcium	7440-70-2	2,810	7.90	25.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD003 SDG#: DE046-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	14,800	6.07	25.8	1
01656	Lithium	7439-93-2	20.3	0.28	2.6	1
01657	Magnesium	7439-95-4	3,220	3.27	12.9	1
06958	Manganese	7439-96-5	190	0.101	0.644	1
10145	Phosphorus	7723-14-0	378	0.722	12.9	1
01662	Potassium	7440-09-7	2,930	23.2	64.4	1
01667	Sodium	7440-23-5	99.8 J	48.1	129	1
07968	Strontium	7440-24-6	14.6	0.0799	0.644	1
06969	Tin	7440-31-5	2.28 J	1.29	12.9	1
06970	Titanium	7440-32-6	856	0.490	1.29	1
10146	Zirconium	7440-67-7	1.21 J	1.08	6.44	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.104 J	0.0796	0.265	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	8.91	0.0796	0.531	2
06126	Barium	7440-39-3	101	0.143	0.531	2
06127	Beryllium	7440-41-7	0.565	0.0212	0.133	2
06128	Cadmium	7440-43-9	0.164	0.0478	0.133	2
06131	Chromium	7440-47-3	17.3	0.159	0.531	2
06132	Cobalt	7440-48-4	6.47	0.0265	0.133	2
06133	Copper	7440-50-8	8.40	0.0876	0.531	2
06135	Lead	7439-92-1	11.0	0.0138	0.265	2
06138	Molybdenum	7439-98-7	0.396	0.0663	0.133	2
06139	Nickel	7440-02-0	11.2	0.133	0.531	2
06141	Selenium	7782-49-2	0.155 J	0.0531	0.531	2
06142	Silver	7440-22-4	0.0333 J	0.0159	0.133	2
06145	Thallium	7440-28-0	0.291	0.0398	0.133	2
06148	Vanadium	7440-62-2	36.5	0.0292	0.133	2
06149	Zinc	7440-66-6	71.6	0.743	3.98	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0761 J	0.0037	0.128	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9	1.1	1.4	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	12.2 U	12.2	40.6	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.27 U	0.27	1.4	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	344	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD003 SDG#: DE046-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.06	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	26.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 23:08	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 15:39	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/06/2011 22:22	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 22:40	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 22:54	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 20:50	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD003 SDG#: DE046-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:43	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:06	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:42	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:07	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 01:57	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 03:06	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 16:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U 210	620	1
04688	Benidine	92-87-5	1,400	U 1,400	4,100	1
04688	Benzoic acid	65-85-0	210	U 210	620	1
04688	Benzyl alcohol	100-51-6	210	U 210	620	1
04688	4-Bromophenyl-phenylether	101-55-3	21	U 21	210	1
04688	Carbazole	86-74-8	21	U 21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	41	U 41	210	1
04688	4-Chloroaniline	106-47-8	82	U 82	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U 21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U 21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U 21	210	1
04688	2-Chloronaphthalene	91-58-7	21	U 21	210	1
04688	2-Chlorophenol	95-57-8	21	U 21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	41	U 41	210	1
04688	Dibenzofuran	132-64-9	21	U 21	210	1
04688	1,2-Dichlorobenzene	95-50-1	21	U 21	210	1
04688	1,3-Dichlorobenzene	541-73-1	21	U 21	210	1
04688	1,4-Dichlorobenzene	106-46-7	21	U 21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	410	1
04688	2,4-Dichlorophenol	120-83-2	21	U 21	210	1
04688	2,4-Dimethylphenol	105-67-9	41	U 41	210	1
04688	3,5-Dimethylphenol	108-68-9	41	U 41	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U 210	620	1
04688	2,4-Dinitrophenol	51-28-5	820	U 820	2,500	1
04688	2,4-Dinitrotoluene	121-14-2	41	U 41	210	1
04688	2,6-Dinitrotoluene	606-20-2	21	U 21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	21	U 21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J 21	410	1
04688	Hexachlorobenzene	118-74-1	21	U 21	210	1
04688	Hexachlorobutadiene	87-68-3	82	U 82	210	1
04688	Hexachlorocyclopentadiene	77-47-4	210	U 210	620	1
04688	Hexachloroethane	67-72-1	21	U 21	210	1
04688	Isophorone	78-59-1	21	U 21	210	1
04688	2-Methylphenol	95-48-7	41	U 41	210	1
04688	4-Methylphenol	106-44-5	41	U 41	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	21	U 21	210	1
04688	3-Nitroaniline	99-09-2	41	U 41	210	1
04688	4-Nitroaniline	100-01-6	82	U 82	210	1
04688	Nitrobenzene	98-95-3	21	U 21	210	1
04688	2-Nitrophenol	88-75-5	21	U 21	210	1
04688	4-Nitrophenol	100-02-7	210	U 210	620	1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U 21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	21	U 21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	210	U 210	620	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	21 U	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	21 U	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	41 U	41	210	1
04688	2,4,6-Trichlorophenol	88-06-2	41 U	41	210	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.82 U	0.82	2.1	1
10138	Acenaphthylene	208-96-8	0.41 U	0.41	2.1	1
10138	Anthracene	120-12-7	0.41 U	0.41	2.1	1
10138	Benzo(a)anthracene	56-55-3	0.82 U	0.82	2.1	1
10138	Benzo(a)pyrene	50-32-8	1.2 J	0.82	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	2.6	0.82	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	1.9 J	0.82	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	0.84 J	0.82	2.1	1
10138	Butylbenzylphthalate	85-68-7	7.4 U	7.4	22	1
10138	Di-n-butylphthalate	84-74-2	7.4 U	7.4	22	1
10138	Chrysene	218-01-9	2.6	0.41	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	0.82 U	0.82	2.1	1
10138	Diethylphthalate	84-66-2	7.4 U	7.4	22	1
10138	Dimethylphthalate	131-11-3	7.4 U	7.4	22	1
10138	Fluoranthene	206-44-0	2.6	0.82	2.1	1
10138	Fluorene	86-73-7	0.82 U	0.82	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.4 J	0.82	2.1	1
10138	1-Methylnaphthalene	90-12-0	0.82 U	0.82	2.1	1
10138	2-Methylnaphthalene	91-57-6	0.82 U	0.82	2.1	1
10138	Naphthalene	91-20-3	0.82 U	0.82	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	0.82 U	0.82	2.1	1
10138	Di-n-octylphthalate	117-84-0	15 J	7.4	22	1
10138	Phenanthrene	85-01-8	1.6 J	0.82	2.1	1
10138	Pyrene	129-00-0	2.1	0.82	2.1	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.5 U	1.5	4.4	1
10401	Dalapon	75-99-0	5.4 U	5.4	11	1
10401	2,4-DB	94-82-6	4.6 U	4.6	4.6	1
10401	Dicamba	1918-00-9	0.49 U	0.49	1.5	1
10401	Dinoseb	88-85-7	0.99 U	0.99	3.0	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.99 U	0.99	2.1	1
10401	MCPA	94-74-6	94 U	94	310	1
10401	MCPP (Mecoprop)	93-65-2	93 U	93	310	1
10401	2,4,5-T	93-76-5	0.10 U	0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.093 U	0.093	0.21	1
When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.082 U	0.082	0.21	1
01363	Alpha BHC	319-84-6	0.042 U	0.042	0.21	1
01363	Beta BHC	319-85-7	0.074 U	0.074	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.042 U	0.042	0.21	1
01363	Chlordane	57-74-9	3.3 U	3.3	4.2	1
01363	p,p-DDD	72-54-8	0.082 U	0.082	0.42	1
01363	p,p-DDE	72-55-9	0.53 U	0.53	0.53	1
01363	p,p-DDT	50-29-3	0.83 U	0.83	0.83	1
01363	Delta BHC	319-86-8	0.044 U	0.044	0.21	1
01363	Dieldrin	60-57-1	0.082 U	0.082	0.42	1
01363	Endosulfan I	959-98-8	0.054 U	0.054	0.21	1
01363	Endosulfan II	33213-65-9	0.15 U	0.15	0.42	1
01363	Endosulfan Sulfate	1031-07-8	0.082 U	0.082	0.42	1
01363	Endrin	72-20-8	0.091 U	0.091	0.42	1
01363	Endrin Aldehyde	7421-93-4	0.19 U	0.19	0.42	1
01363	Endrin Ketone	53494-70-5	0.082 U	0.082	0.42	1
01363	Heptachlor	76-44-8	0.074 U	0.074	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.10 U	0.10	0.21	1
01363	Methoxychlor	72-43-5	0.42 U	0.42	2.1	1
01363	Mirex	2385-85-5	0.10 U	0.10	0.42	1
01363	Toxaphene	8001-35-2	2.7 U	2.7	8.2	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.5 U	2.5	8.2	2
10225	Aroclor 5442	12642-23-8	2.5 U	2.5	8.2	2
10225	Aroclor 5460	11126-42-4	8.0 J	2.5	8.2	2
10225	PCB-1016	12674-11-2	0.82 U	0.82	4.2	2
10225	PCB-1221	11104-28-2	1.2 U	1.2	4.2	2
10225	PCB-1232	11141-16-5	1.3 U	1.3	4.2	2
10225	PCB-1242	53469-21-9	1.2 U	1.2	4.2	2
10225	PCB-1248	12672-29-6	0.82 U	0.82	4.2	2
10225	PCB-1254	11097-69-1	12	0.82	4.2	2
10225	PCB-1260	11096-82-5	4.2 J	0.82	4.2	2
10225	PCB-1262	37324-23-5	0.82 U	0.82	4.2	2
10225	PCB-1268	11100-14-4	0.82 U	0.82	4.2	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,200	6.04	24.0	1
07914	Boron	7440-42-8	4.11 J	1.07	6.00	1
01650	Calcium	7440-70-2	2,560	7.36	24.0	1
01654	Iron	7439-89-6	19,200	5.65	24.0	1
01656	Lithium	7439-93-2	22.6	0.26	2.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	4,420	3.05	12.0	1
06958	Manganese	7439-96-5	287	0.0936	0.600	1
10145	Phosphorus	7723-14-0	451	0.672	12.0	1
01662	Potassium	7440-09-7	3,360	21.6	60.0	1
01667	Sodium	7440-23-5	75.7 J	44.8	120	1
07968	Strontium	7440-24-6	15.8	0.0744	0.600	1
06969	Tin	7440-31-5	2.32 J	1.20	12.0	1
06970	Titanium	7440-32-6	1,140	0.456	1.20	1
10146	Zirconium	7440-67-7	1.01 U	1.01	6.00	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.166 J	0.0720	0.240	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.63	0.0720	0.480	2
06126	Barium	7440-39-3	113	0.130	0.480	2
06127	Beryllium	7440-41-7	0.649	0.0192	0.120	2
06128	Cadmium	7440-43-9	0.224	0.0432	0.120	2
06131	Chromium	7440-47-3	25.3	0.144	0.480	2
06132	Cobalt	7440-48-4	6.97	0.0240	0.120	2
06133	Copper	7440-50-8	11.0	0.0792	0.480	2
06135	Lead	7439-92-1	16.5	0.0125	0.240	2
06138	Molybdenum	7439-98-7	0.819	0.0600	0.120	2
06139	Nickel	7440-02-0	17.6	0.120	0.480	2
06141	Selenium	7782-49-2	0.199 J	0.0480	0.480	2
06142	Silver	7440-22-4	0.0489 J	0.0144	0.120	2
06145	Thallium	7440-28-0	0.358	0.0360	0.120	2
06148	Vanadium	7440-62-2	43.7	0.0264	0.120	2
06149	Zinc	7440-66-6	82.4	0.672	3.60	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0309 J	0.0035	0.120	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6	0.99	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.1 U	11.1	37.1	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.60 J	0.25	1.2	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	434	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.64	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 10:18	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/10/2011 23:05	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/06/2011 22:50	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 23:08	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 21:08	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:26	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 10:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 10:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:09	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 00:07	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 01:10	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 11:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900	21	210	1
04688	Acenaphthylene	208-96-8	1,900	21	210	1
04688	Aniline	62-53-3	1,200	210	620	1
04688	Anthracene	120-12-7	1,900	21	210	1
04688	Benziidine	92-87-5	3,600	J 1,400	4,100	1
04688	Benzo(a)anthracene	56-55-3	1,900	21	210	1
04688	Benzo(a)pyrene	50-32-8	1,700	21	210	1
04688	Benzo(b)fluoranthene	205-99-2	1,800	21	210	1
04688	Benzo(g,h,i)perylene	191-24-2	1,500	21	210	1
04688	Benzo(k)fluoranthene	207-08-9	1,700	21	210	1
04688	Benzoic acid	65-85-0	1,900	210	620	1
04688	Benzyl alcohol	100-51-6	1,800	210	620	1
04688	4-Bromophenyl-phenylether	101-55-3	1,800	21	210	1
04688	Butylbenzylphthalate	85-68-7	2,100	21	210	1
04688	Di-n-butylphthalate	84-74-2	1,900	21	210	1
04688	Carbazole	86-74-8	1,900	21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	1,900	41	210	1
04688	4-Chloroaniline	106-47-8	1,500	82	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,900	21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700	21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800	21	210	1
04688	2-Chloronaphthalene	91-58-7	1,600	21	210	1
04688	2-Chlorophenol	95-57-8	1,800	21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,800	41	210	1
04688	Chrysene	218-01-9	1,900	21	210	1
04688	Dibenz(a,h)anthracene	53-70-3	1,600	21	210	1
04688	Dibenzofuran	132-64-9	1,800	21	210	1
04688	1,2-Dichlorobenzene	95-50-1	1,800	21	210	1
04688	1,3-Dichlorobenzene	541-73-1	1,700	21	210	1
04688	1,4-Dichlorobenzene	106-46-7	1,800	21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,600	120	410	1
04688	2,4-Dichlorophenol	120-83-2	1,800	21	210	1
04688	Diethylphthalate	84-66-2	1,800	21	210	1
04688	2,4-Dimethylphenol	105-67-9	1,900	41	210	1
04688	3,5-Dimethylphenol	108-68-9	2,100	41	210	1
04688	Dimethylphthalate	131-11-3	1,900	21	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,600	210	620	1
04688	2,4-Dinitrophenol	51-28-5	2,800	820	2,500	1
04688	2,4-Dinitrotoluene	121-14-2	1,900	41	210	1
04688	2,6-Dinitrotoluene	606-20-2	1,900	21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	2,000	21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,100	21	410	1
04688	Fluoranthene	206-44-0	1,900	21	210	1
04688	Fluorene	86-73-7	1,800	21	210	1
04688	Hexachlorobenzene	118-74-1	1,900	21	210	1
04688	Hexachlorobutadiene	87-68-3	2,000	82	210	1
04688	Hexachlorocyclopentadiene	77-47-4	3,300	210	620	1
04688	Hexachloroethane	67-72-1	1,900	21	210	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600	21	210	1
04688	Isophorone	78-59-1	1,800	21	210	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,800	21	210	1
04688	2-Methylnaphthalene	91-57-6	1,700	21	210	1
04688	2-Methylphenol	95-48-7	1,800	41	210	1
04688	4-Methylphenol	106-44-5	1,700	41	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,700	21	210	1
04688	2-Nitroaniline	88-74-4	2,100	21	210	1
04688	3-Nitroaniline	99-09-2	1,900	41	210	1
04688	4-Nitroaniline	100-01-6	1,500	82	210	1
04688	Nitrobenzene	98-95-3	2,000	21	210	1
04688	2-Nitrophenol	88-75-5	1,900	21	210	1
04688	4-Nitrophenol	100-02-7	2,000	210	620	1
04688	N-Nitrosodimethylamine	62-75-9	1,500	41	210	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	1,900	21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	2,000	21	210	1
04688	Pentachlorophenol	87-86-5	1,600	210	620	1
04688	Phenanthrene	85-01-8	1,800	21	210	1
04688	Phenol	108-95-2	1,800	21	210	1
04688	Pyrene	129-00-0	2,100	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,800	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	2,000	41	210	1
04688	2,4,6-Trichlorophenol	88-06-2	2,100	41	210	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	40	0.82	2.1	1
10138	Acenaphthylene	208-96-8	38	0.41	2.1	1
10138	Anthracene	120-12-7	40	0.41	2.1	1
10138	Benzo(a)anthracene	56-55-3	42	0.82	2.1	1
10138	Benzo(a)pyrene	50-32-8	40	0.82	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	46	0.82	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	31	0.82	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	41	0.82	2.1	1
10138	Butylbenzylphthalate	85-68-7	49	7.4	22	1
10138	Di-n-butylphthalate	84-74-2	46	7.4	22	1
10138	Chrysene	218-01-9	39	0.41	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	34	0.82	2.1	1
10138	Diethylphthalate	84-66-2	42	7.4	22	1
10138	Dimethylphthalate	131-11-3	42	7.4	22	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	54	7.4	22	1
10138	Fluoranthene	206-44-0	43	0.82	2.1	1
10138	Fluorene	86-73-7	40	0.82	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	35	0.82	2.1	1
10138	1-Methylnaphthalene	90-12-0	39	0.82	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM						
10138	2-Methylnaphthalene	91-57-6	36	0.82	2.1	1
10138	Naphthalene	91-20-3	39	0.82	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	42	0.82	2.1	1
10138	Di-n-octylphthalate	117-84-0	52	7.4	22	1
10138	Phenanthrene	85-01-8	40	0.82	2.1	1
10138	Pyrene	129-00-0	38	0.82	2.1	1
Herbicides SW-846 8151A						
10401	2,4-D	94-75-7	11	1.5	4.4	1
10401	Dalapon	75-99-0	23	5.4	11	1
10401	2,4-DB	94-82-6	11	0.77	2.1	1
10401	Dicamba	1918-00-9	0.84 J	0.49	1.5	1
10401	Dinoseb	88-85-7	2.1 J	0.99	3.0	1
10401	2,4-DP (Dichlorprop)	120-36-5	10	0.99	2.1	1
10401	MCPA	94-74-6	1,500	94	310	1
10401	MCPP (Mecoprop)	93-65-2	900	93	310	1
10401	2,4,5-T	93-76-5	0.58	0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.84	0.093	0.21	1
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.31	0.082	0.21	1
01363	Alpha BHC	319-84-6	0.21	0.042	0.21	1
01363	Beta BHC	319-85-7	0.28	0.074	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.23	0.042	0.21	1
01363	Chlordane	57-74-9	0.99 U	0.99	4.2	1
01363	p,p-DDD	72-54-8	0.68	0.082	0.42	1
01363	p,p-DDE	72-55-9	1.5	0.082	0.42	1
01363	p,p-DDT	50-29-3	1.0	0.082	0.42	1
01363	Delta BHC	319-86-8	0.27	0.044	0.21	1
01363	Dieldrin	60-57-1	0.53	0.082	0.42	1
01363	Endosulfan I	959-98-8	0.22	0.054	0.21	1
01363	Endosulfan II	33213-65-9	0.56	0.082	0.42	1
01363	Endosulfan Sulfate	1031-07-8	0.69	0.082	0.42	1
01363	Endrin	72-20-8	0.53	0.082	0.42	1
01363	Endrin Aldehyde	7421-93-4	0.48	0.082	0.42	1
01363	Endrin Ketone	53494-70-5	0.52	0.082	0.42	1
01363	Heptachlor	76-44-8	0.23	0.074	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.33	0.042	0.21	1
01363	Methoxychlor	72-43-5	2.5	0.42	2.1	1
01363	Mirex	2385-85-5	0.082 U	0.082	0.42	1
01363	Toxaphene	8001-35-2	2.7 U	2.7	8.2	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	2.5 U	2.5	8.2	2
10225	Aroclor 5442	12642-23-8	2.5 U	2.5	8.2	2
10225	Aroclor 5460	11126-42-4	2.5 U	2.5	8.2	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	PCB-1016	12674-11-2	21	0.82	4.2	2
10225	PCB-1221	11104-28-2	1.2 U	1.2	4.2	2
10225	PCB-1232	11141-16-5	1.3 U	1.3	4.2	2
10225	PCB-1242	53469-21-9	1.2 U	1.2	4.2	2
10225	PCB-1248	12672-29-6	0.82 U	0.82	4.2	2
10225	PCB-1254	11097-69-1	9.2	0.82	4.2	2
10225	PCB-1260	11096-82-5	35	0.82	4.2	2
10225	PCB-1262	37324-23-5	0.82 U	0.82	4.2	2
10225	PCB-1268	11100-14-4	0.82 U	0.82	4.2	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,800	6.10	24.2	1
07914	Boron	7440-42-8	231	1.08	6.06	1
01650	Calcium	7440-70-2	3,380	7.43	24.2	1
01654	Iron	7439-89-6	19,900	5.71	24.2	1
01656	Lithium	7439-93-2	140	0.27	2.4	1
01657	Magnesium	7439-95-4	4,860	3.08	12.1	1
06958	Manganese	7439-96-5	352	0.0945	0.606	1
10145	Phosphorus	7723-14-0	576	0.679	12.1	1
01662	Potassium	7440-09-7	4,580	21.8	60.6	1
01667	Sodium	7440-23-5	1,250	45.2	121	1
07968	Strontium	7440-24-6	133	0.0751	0.606	1
06969	Tin	7440-31-5	441	1.21	12.1	1
06970	Titanium	7440-32-6	1,410	0.461	1.21	1
10146	Zirconium	7440-67-7	109	1.02	6.06	1
		SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.746	0.0727	0.242	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.14	0.0727	0.485	2
06126	Barium	7440-39-3	125	0.131	0.485	2
06127	Beryllium	7440-41-7	1.82	0.0194	0.121	2
06128	Cadmium	7440-43-9	1.79	0.0436	0.121	2
06131	Chromium	7440-47-3	37.2	0.145	0.485	2
06132	Cobalt	7440-48-4	80.1	0.0242	0.121	2
06133	Copper	7440-50-8	25.3	0.0800	0.485	2
06135	Lead	7439-92-1	21.7	0.0126	0.242	2
06138	Molybdenum	7439-98-7	17.0	0.0606	0.121	2
06139	Nickel	7440-02-0	33.3	0.121	0.485	2
06141	Selenium	7782-49-2	2.37	0.0485	0.485	2
06142	Silver	7440-22-4	15.2	0.0145	0.121	2
06145	Thallium	7440-28-0	0.983	0.0364	0.121	2
06148	Vanadium	7440-62-2	56.9	0.0267	0.121	2
06149	Zinc	7440-66-6	94.6	0.679	3.64	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
00159	Mercury	7439-97-6	0.233	0.0034	0.119	1
Wet Chemistry						
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.2	0.99	1.2	1
10147	7a Perchlorate EPA 314.0	14797-73-0	622	11.1	37.1	1
05892	3a Cr VI by EPA 7199	18540-29-9	42.2	1.2	6.2	5
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 10:53	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/10/2011 23:37	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/06/2011 23:18	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 23:22	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 21:27	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

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Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 10:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 10:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:36	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:11	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 00:44	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 02:20	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 11:26	Ashley M Adams	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	2,000	21	210	1
04688	Acenaphthylene	208-96-8	2,100	21	210	1
04688	Aniline	62-53-3	1,400	210	620	1
04688	Anthracene	120-12-7	2,000	21	210	1
04688	Benidine	92-87-5	2,000	J 1,400	4,100	1
04688	Benzo(a)anthracene	56-55-3	1,900	21	210	1
04688	Benzo(a)pyrene	50-32-8	1,700	21	210	1
04688	Benzo(b)fluoranthene	205-99-2	1,800	21	210	1
04688	Benzo(g,h,i)perylene	191-24-2	1,600	21	210	1
04688	Benzo(k)fluoranthene	207-08-9	1,800	21	210	1
04688	Benzoic acid	65-85-0	2,000	210	620	1
04688	Benzyl alcohol	100-51-6	1,800	210	620	1
04688	4-Bromophenyl-phenylether	101-55-3	1,900	21	210	1
04688	Butylbenzylphthalate	85-68-7	2,100	21	210	1
04688	Di-n-butylphthalate	84-74-2	1,900	21	210	1
04688	Carbazole	86-74-8	2,000	21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	1,900	41	210	1
04688	4-Chloroaniline	106-47-8	1,700	82	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	2,000	21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700	21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800	21	210	1
04688	2-Chloronaphthalene	91-58-7	1,800	21	210	1
04688	2-Chlorophenol	95-57-8	1,900	21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	2,000	41	210	1
04688	Chrysene	218-01-9	1,900	21	210	1
04688	Dibenz(a,h)anthracene	53-70-3	1,600	21	210	1
04688	Dibenzofuran	132-64-9	2,000	21	210	1
04688	1,2-Dichlorobenzene	95-50-1	1,800	21	210	1
04688	1,3-Dichlorobenzene	541-73-1	1,800	21	210	1
04688	1,4-Dichlorobenzene	106-46-7	1,800	21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,700	120	410	1
04688	2,4-Dichlorophenol	120-83-2	2,000	21	210	1
04688	Diethylphthalate	84-66-2	2,000	21	210	1
04688	2,4-Dimethylphenol	105-67-9	1,900	41	210	1
04688	3,5-Dimethylphenol	108-68-9	2,100	41	210	1
04688	Dimethylphthalate	131-11-3	1,900	21	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,600	210	620	1
04688	2,4-Dinitrophenol	51-28-5	2,700	820	2,500	1
04688	2,4-Dinitrotoluene	121-14-2	2,000	41	210	1
04688	2,6-Dinitrotoluene	606-20-2	2,000	21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	2,100	21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	21	410	1
04688	Fluoranthene	206-44-0	2,000	21	210	1
04688	Fluorene	86-73-7	1,900	21	210	1
04688	Hexachlorobenzene	118-74-1	2,000	21	210	1
04688	Hexachlorobutadiene	87-68-3	2,100	82	210	1
04688	Hexachlorocyclopentadiene	77-47-4	3,500	210	620	1
04688	Hexachloroethane	67-72-1	1,900	21	210	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600	21	210	1
04688	Isophorone	78-59-1	1,900	21	210	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,900	21	210	1
04688	2-Methylnaphthalene	91-57-6	1,800	21	210	1
04688	2-Methylphenol	95-48-7	1,900	41	210	1
04688	4-Methylphenol	106-44-5	1,800	41	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,800	21	210	1
04688	2-Nitroaniline	88-74-4	2,300	21	210	1
04688	3-Nitroaniline	99-09-2	2,000	41	210	1
04688	4-Nitroaniline	100-01-6	1,900	82	210	1
04688	Nitrobenzene	98-95-3	2,000	21	210	1
04688	2-Nitrophenol	88-75-5	1,900	21	210	1
04688	4-Nitrophenol	100-02-7	2,200	210	620	1
04688	N-Nitrosodimethylamine	62-75-9	1,600	41	210	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	2,000	21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,900	21	210	1
04688	Pentachlorophenol	87-86-5	1,600	210	620	1
04688	Phenanthrene	85-01-8	1,900	21	210	1
04688	Phenol	108-95-2	1,900	21	210	1
04688	Pyrene	129-00-0	2,100	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	2,000	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	2,100	41	210	1
04688	2,4,6-Trichlorophenol	88-06-2	2,200	41	210	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	40	0.82	2.1	1
10138	Acenaphthylene	208-96-8	40	0.41	2.1	1
10138	Anthracene	120-12-7	39	0.41	2.1	1
10138	Benzo(a)anthracene	56-55-3	45	0.82	2.1	1
10138	Benzo(a)pyrene	50-32-8	42	0.82	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	47	0.82	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	28	0.82	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	45	0.82	2.1	1
10138	Butylbenzylphthalate	85-68-7	53	7.4	22	1
10138	Di-n-butylphthalate	84-74-2	46	7.4	22	1
10138	Chrysene	218-01-9	41	0.41	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	32	0.82	2.1	1
10138	Diethylphthalate	84-66-2	46	7.4	22	1
10138	Dimethylphthalate	131-11-3	46	7.4	22	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	65	7.4	22	1
10138	Fluoranthene	206-44-0	44	0.82	2.1	1
10138	Fluorene	86-73-7	43	0.82	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	32	0.82	2.1	1
10138	1-Methylnaphthalene	90-12-0	38	0.82	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM						
10138	2-Methylnaphthalene	91-57-6	35	0.82	2.1	1
10138	Naphthalene	91-20-3	41	0.82	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	9.5	0.82	2.1	1
10138	Di-n-octylphthalate	117-84-0	55	7.4	22	1
10138	Phenanthrene	85-01-8	41	0.82	2.1	1
10138	Pyrene	129-00-0	40	0.82	2.1	1
Herbicides SW-846 8151A						
10401	2,4-D	94-75-7	12	1.5	4.4	1
10401	Dalapon	75-99-0	24	5.4	11	1
10401	2,4-DB	94-82-6	12	0.77	2.1	1
10401	Dicamba	1918-00-9	0.69 J	0.49	1.5	1
10401	Dinoseb	88-85-7	2.8 J	0.99	3.0	1
10401	2,4-DP (Dichlorprop)	120-36-5	10	0.99	2.1	1
10401	MCPA	94-74-6	1,600	94	310	1
10401	MCPP (Mecoprop)	93-65-2	950	93	310	1
10401	2,4,5-T	93-76-5	0.61	0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.87	0.093	0.21	1
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.41	0.082	0.21	1
01363	Alpha BHC	319-84-6	0.31	0.042	0.21	1
01363	Beta BHC	319-85-7	0.23	0.074	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.35	0.042	0.21	1
01363	Chlordane	57-74-9	0.99 U	0.99	4.2	1
01363	p,p-DDD	72-54-8	1.2	0.082	0.42	1
01363	p,p-DDE	72-55-9	1.9	0.082	0.42	1
01363	p,p-DDT	50-29-3	1.5	0.082	0.42	1
01363	Delta BHC	319-86-8	0.42	0.044	0.21	1
01363	Dieldrin	60-57-1	0.80	0.082	0.42	1
01363	Endosulfan I	959-98-8	0.32	0.054	0.21	1
01363	Endosulfan II	33213-65-9	0.94	0.082	0.42	1
01363	Endosulfan Sulfate	1031-07-8	0.98	0.082	0.42	1
01363	Endrin	72-20-8	0.83	0.082	0.42	1
01363	Endrin Aldehyde	7421-93-4	0.93	0.082	0.42	1
01363	Endrin Ketone	53494-70-5	0.78	0.082	0.42	1
01363	Heptachlor	76-44-8	0.36	0.074	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.52	0.042	0.21	1
01363	Methoxychlor	72-43-5	4.0	0.42	2.1	1
01363	Mirex	2385-85-5	0.082 U	0.082	0.42	1
01363	Toxaphene	8001-35-2	2.7 U	2.7	8.2	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	2.5 U	2.5	8.2	2
10225	Aroclor 5442	12642-23-8	2.5 U	2.5	8.2	2
10225	Aroclor 5460	11126-42-4	9.8	2.5	8.2	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	PCB-1016	12674-11-2	23	0.82	4.2	2
10225	PCB-1221	11104-28-2	1.2 U	1.2	4.2	2
10225	PCB-1232	11141-16-5	1.3 U	1.3	4.2	2
10225	PCB-1242	53469-21-9	1.2 U	1.2	4.2	2
10225	PCB-1248	12672-29-6	0.82 U	0.82	4.2	2
10225	PCB-1254	11097-69-1	17	0.82	4.2	2
10225	PCB-1260	11096-82-5	32	0.82	4.2	2
10225	PCB-1262	37324-23-5	0.82 U	0.82	4.2	2
10225	PCB-1268	11100-14-4	0.82 U	0.82	4.2	2
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,300	6.10	24.2	1
07914	Boron	7440-42-8	233	1.08	6.06	1
01650	Calcium	7440-70-2	3,270	7.43	24.2	1
01654	Iron	7439-89-6	19,200	5.71	24.2	1
01656	Lithium	7439-93-2	142	0.27	2.4	1
01657	Magnesium	7439-95-4	4,750	3.08	12.1	1
06958	Manganese	7439-96-5	345	0.0945	0.606	1
10145	Phosphorus	7723-14-0	551	0.679	12.1	1
01662	Potassium	7440-09-7	4,520	21.8	60.6	1
01667	Sodium	7440-23-5	1,270	45.2	121	1
07968	Strontium	7440-24-6	135	0.0751	0.606	1
06969	Tin	7440-31-5	445	1.21	12.1	1
06970	Titanium	7440-32-6	1,380	0.461	1.21	1
10146	Zirconium	7440-67-7	111	1.02	6.06	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.827	0.0727	0.242	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.90	0.0727	0.485	2
06126	Barium	7440-39-3	140	0.131	0.485	2
06127	Beryllium	7440-41-7	1.77	0.0194	0.121	2
06128	Cadmium	7440-43-9	1.75	0.0436	0.121	2
06131	Chromium	7440-47-3	36.9	0.145	0.485	2
06132	Cobalt	7440-48-4	79.9	0.0242	0.121	2
06133	Copper	7440-50-8	24.2	0.0800	0.485	2
06135	Lead	7439-92-1	18.2	0.0126	0.242	2
06138	Molybdenum	7439-98-7	17.2	0.0606	0.121	2
06139	Nickel	7440-02-0	34.7	0.121	0.485	2
06141	Selenium	7782-49-2	2.34	0.0485	0.485	2
06142	Silver	7440-22-4	15.1	0.0145	0.121	2
06145	Thallium	7440-28-0	0.944	0.0364	0.121	2
06148	Vanadium	7440-62-2	59.7	0.0267	0.121	2
06149	Zinc	7440-66-6	99.9	0.679	3.64	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
00159	Mercury	7439-97-6	0.233	0.0034	0.119	1
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 11:28	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 00:09	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/07/2011 00:41	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 23:36	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 21:46	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 10:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 10:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:12	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Sample Description: SED-005-SIV-SD-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172041
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,100	6.04	24.0	1
07914	Boron	7440-42-8	4.81 J	1.07	6.00	1
01650	Calcium	7440-70-2	2,680	7.36	24.0	1
01654	Iron	7439-89-6	19,000	5.65	24.0	1
01656	Lithium	7439-93-2	22.6	0.26	2.4	1
01657	Magnesium	7439-95-4	4,470	3.05	12.0	1
06958	Manganese	7439-96-5	283	0.0936	0.600	1
10145	Phosphorus	7723-14-0	469	0.672	12.0	1
01662	Potassium	7440-09-7	3,170	21.6	60.0	1
01667	Sodium	7440-23-5	76.8 J	44.8	120	1
07968	Strontium	7440-24-6	16.4	0.0744	0.600	1
06969	Tin	7440-31-5	2.20 J	1.20	12.0	1
06970	Titanium	7440-32-6	1,100	0.456	1.20	1
10146	Zirconium	7440-67-7	1.56 J	1.01	6.00	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0720 U	0.0720	0.240	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	3.65	0.0720	0.480	2
06126	Barium	7440-39-3	76.4	0.130	0.480	2
06127	Beryllium	7440-41-7	0.499	0.0192	0.120	2
06128	Cadmium	7440-43-9	0.187	0.0432	0.120	2
06131	Chromium	7440-47-3	16.0	0.144	0.480	2
06132	Cobalt	7440-48-4	4.87	0.0240	0.120	2
06133	Copper	7440-50-8	7.80	0.0792	0.480	2
06135	Lead	7439-92-1	12.7	0.0125	0.240	2
06138	Molybdenum	7439-98-7	0.535	0.0600	0.120	2
06139	Nickel	7440-02-0	11.1	0.120	0.480	2
06141	Selenium	7782-49-2	0.181 J	0.0480	0.480	2
06142	Silver	7440-22-4	0.0469 J	0.0144	0.120	2
06145	Thallium	7440-28-0	0.233	0.0360	0.120	2
06148	Vanadium	7440-62-2	30.5	0.0264	0.120	2
06149	Zinc	7440-66-6	56.5	0.672	3.60	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0363 J	0.0034	0.119	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.5	0.99	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	35.8 J	11.1	37.1	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.75 J	0.25	1.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172041
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	430	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.50	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1
11626	28a Moisture Content by 160.3	n.a.	20.3	0.50	0.50	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:33	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 10:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172041
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD005 SDG#: DE046-03DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 10:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:34	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:10	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 00:25	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 01:57	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 12:14	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD007 SDG#: DE046-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	610	1
04688	Benzidine	92-87-5	1,400	U 1,400	4,100	1
04688	Benzo(g,h,i)perylene	191-24-2	22	J 20	200	1
04688	Benzoic acid	65-85-0	200	U 200	610	1
04688	Benzyl alcohol	100-51-6	200	U 200	610	1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200	1
04688	Carbazole	86-74-8	20	U 20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	41	U 41	200	1
04688	4-Chloroaniline	106-47-8	81	U 81	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200	1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200	1
04688	2-Chlorophenol	95-57-8	20	U 20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	41	U 41	200	1
04688	Dibenzofuran	132-64-9	20	U 20	200	1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200	1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200	1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	410	1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200	1
04688	2,4-Dimethylphenol	105-67-9	41	U 41	200	1
04688	3,5-Dimethylphenol	108-68-9	41	U 41	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	610	1
04688	2,4-Dinitrophenol	51-28-5	810	U 810	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	41	U 41	200	1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200	1
04688	Hexachlorobenzene	118-74-1	20	U 20	200	1
04688	Hexachlorobutadiene	87-68-3	81	U 81	200	1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	610	1
04688	Hexachloroethane	67-72-1	20	U 20	200	1
04688	Isophorone	78-59-1	20	U 20	200	1
04688	2-Methylphenol	95-48-7	41	U 41	200	1
04688	4-Methylphenol	106-44-5	41	U 41	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	20	U 20	200	1
04688	3-Nitroaniline	99-09-2	41	U 41	200	1
04688	4-Nitroaniline	100-01-6	81	U 81	200	1
04688	Nitrobenzene	98-95-3	20	U 20	200	1
04688	2-Nitrophenol	88-75-5	20	U 20	200	1
04688	4-Nitrophenol	100-02-7	200	U 200	610	1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	200	U 200	610	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD007 SDG#: DE046-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	20 U	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	20 U	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	41 U	41	200	1
04688	2,4,6-Trichlorophenol	88-06-2	41 U	41	200	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.81 U	0.81	2.0	1
10138	Acenaphthylene	208-96-8	0.41 U	0.41	2.0	1
10138	Anthracene	120-12-7	0.69 J	0.41	2.0	1
10138	Benzo(a)anthracene	56-55-3	0.81 U	0.81	2.0	1
10138	Benzo(a)pyrene	50-32-8	10	0.81	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	35	0.81	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	0.81 U	0.81	2.0	1
10138	Butylbenzylphthalate	85-68-7	14 J	7.3	22	1
10138	Di-n-butylphthalate	84-74-2	7.3 U	7.3	22	1
10138	Chrysene	218-01-9	29	0.41	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	5.7	0.81	2.0	1
10138	Diethylphthalate	84-66-2	7.3 U	7.3	22	1
10138	Dimethylphthalate	131-11-3	7.3 U	7.3	22	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	28	7.3	22	1
10138	Fluoranthene	206-44-0	3.8	0.81	2.0	1
10138	Fluorene	86-73-7	0.81 U	0.81	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	5.9	0.81	2.0	1
10138	1-Methylnaphthalene	90-12-0	0.81 U	0.81	2.0	1
10138	2-Methylnaphthalene	91-57-6	0.81 U	0.81	2.0	1
10138	Naphthalene	91-20-3	0.86 J	0.81	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	0.81 U	0.81	2.0	1
10138	Di-n-octylphthalate	117-84-0	7.3 U	7.3	22	1
10138	Phenanthrene	85-01-8	1.4 J	0.81	2.0	1
10138	Pyrene	129-00-0	6.8	0.81	2.0	1
The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.						
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.5 U	1.5	4.4	1
10401	Dalapon	75-99-0	5.4 U	5.4	11	1
10401	2,4-DB	94-82-6	2.3	0.75	2.1	1
10401	Dicamba	1918-00-9	0.49 U	0.49	1.5	1
10401	Dinoseb	88-85-7	0.97 U	0.97	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.97 U	0.97	2.1	1
10401	MCPA	94-74-6	92 U	92	300	1
10401	MCPP (Mecoprop)	93-65-2	91 U	91	300	1
10401	2,4,5-T	93-76-5	0.10 U	0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.091 U	0.091	0.21	1
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.080 U	0.080	0.20	1
01363	Alpha BHC	319-84-6	0.041 U	0.041	0.20	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD007 SDG#: DE046-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Beta BHC	319-85-7	0.073 U	0.073	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.060 J	0.041	0.20	1
01363	Chlordane	57-74-9	5.7 U	5.7	5.7	1
01363	p,p-DDD	72-54-8	0.080 U	0.080	0.41	1
01363	p,p-DDE	72-55-9	1.6	0.080	0.41	1
01363	p,p-DDT	50-29-3	3.8	0.40	2.1	5
01363	Delta BHC	319-86-8	0.044 U	0.044	0.20	1
01363	Dieldrin	60-57-1	0.32 U	0.32	0.41	1
01363	Endosulfan I	959-98-8	0.054 U	0.054	0.20	1
01363	Endosulfan II	33213-65-9	0.080 U	0.080	0.41	1
01363	Endosulfan Sulfate	1031-07-8	0.080 U	0.080	0.41	1
01363	Endrin	72-20-8	0.19 U	0.19	0.41	1
01363	Endrin Aldehyde	7421-93-4	0.79 U	0.79	0.79	1
01363	Endrin Ketone	53494-70-5	0.080 U	0.080	0.41	1
01363	Heptachlor	76-44-8	0.12 U	0.12	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.24 U	0.24	0.24	1
01363	Methoxychlor	72-43-5	0.41 U	0.41	2.0	1
01363	Mirex	2385-85-5	0.080 U	0.080	0.41	1
01363	Toxaphene	8001-35-2	2.7 U	2.7	8.0	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	2.4 U	2.4	8.0	2
10225	Aroclor 5442	12642-23-8	2.4 U	2.4	8.0	2
10225	Aroclor 5460	11126-42-4	9.6	2.4	8.0	2
10225	PCB-1016	12674-11-2	0.80 U	0.80	4.1	2
10225	PCB-1221	11104-28-2	1.2 U	1.2	4.1	2
10225	PCB-1232	11141-16-5	1.3 U	1.3	4.1	2
10225	PCB-1242	53469-21-9	1.2 U	1.2	4.1	2
10225	PCB-1248	12672-29-6	0.80 U	0.80	4.1	2
10225	PCB-1254	11097-69-1	3.1 J	0.80	4.1	2
10225	PCB-1260	11096-82-5	27	0.80	4.1	2
10225	PCB-1262	37324-23-5	0.80 U	0.80	4.1	2
10225	PCB-1268	11100-14-4	0.80 U	0.80	4.1	2
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	11,300	5.94	23.6	1
07914	Boron	7440-42-8	7.37	1.05	5.91	1
01650	Calcium	7440-70-2	3,980	7.24	23.6	1
01654	Iron	7439-89-6	17,200	5.56	23.6	1
01656	Lithium	7439-93-2	18.2	0.26	2.4	1
01657	Magnesium	7439-95-4	3,910	3.00	11.8	1
06958	Manganese	7439-96-5	277	0.0921	0.591	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD007 SDG#: DE046-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
10145	Phosphorus	7723-14-0	427	0.661	11.8	1
01662	Potassium	7440-09-7	2,880	21.3	59.1	1
01667	Sodium	7440-23-5	69.5 J	44.1	118	1
07968	Strontium	7440-24-6	24.3	0.0732	0.591	1
06969	Tin	7440-31-5	2.36 J	1.18	11.8	1
06970	Titanium	7440-32-6	906	0.449	1.18	1
10146	Zirconium	7440-67-7	1.02 J	0.992	5.91	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.145 J	0.0702	0.234	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	4.12	0.0702	0.468	2
06126	Barium	7440-39-3	96.6	0.126	0.468	2
06127	Beryllium	7440-41-7	0.439	0.0187	0.117	2
06128	Cadmium	7440-43-9	0.305	0.0421	0.117	2
06131	Chromium	7440-47-3	16.5	0.140	0.468	2
06132	Cobalt	7440-48-4	5.12	0.0234	0.117	2
06133	Copper	7440-50-8	10.8	0.0772	0.468	2
06135	Lead	7439-92-1	11.7	0.0122	0.234	2
06138	Molybdenum	7439-98-7	0.495	0.0585	0.117	2
06139	Nickel	7440-02-0	12.8	0.117	0.468	2
06141	Selenium	7782-49-2	0.168 J	0.0468	0.468	2
06142	Silver	7440-22-4	0.0542 J	0.0140	0.117	2
06145	Thallium	7440-28-0	0.234	0.0351	0.117	2
06148	Vanadium	7440-62-2	32.3	0.0257	0.117	2
06149	Zinc	7440-66-6	111	0.655	3.51	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0257 J	0.0033	0.114	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.9	0.97	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.9 U	10.9	36.5	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.24 U	0.24	1.2	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	471	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD007 SDG#: DE046-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	Wet Chemistry	SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.88	0.0100	0.0100	1
	Wet Chemistry	EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	17.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 23:43	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 16:11	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/07/2011 01:09	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 23:50	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/22/2011 23:00	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 22:04	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD007 SDG#: DE046-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:47	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:15	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:15	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:46	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:13	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 02:16	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 03:29	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 16:23	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD008 SDG#: DE046-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	250	U 250	740	1
04688	Benzidine	92-87-5	1,700	U 1,700	5,000	1
04688	Benzoic acid	65-85-0	250	U 250	740	1
04688	Benzyl alcohol	100-51-6	250	U 250	740	1
04688	4-Bromophenyl-phenylether	101-55-3	25	U 25	250	1
04688	Carbazole	86-74-8	25	U 25	250	1
04688	4-Chloro-3-methylphenol	59-50-7	50	U 50	250	1
04688	4-Chloroaniline	106-47-8	99	U 99	250	1
04688	bis(2-Chloroethoxy)methane	111-91-1	25	U 25	250	1
04688	bis(2-Chloroethyl)ether	111-44-4	25	U 25	250	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	25	U 25	250	1
04688	2-Chloronaphthalene	91-58-7	25	U 25	250	1
04688	2-Chlorophenol	95-57-8	25	U 25	250	1
04688	4-Chlorophenyl-phenylether	7005-72-3	50	U 50	250	1
04688	Dibenzofuran	132-64-9	25	U 25	250	1
04688	1,2-Dichlorobenzene	95-50-1	25	U 25	250	1
04688	1,3-Dichlorobenzene	541-73-1	25	U 25	250	1
04688	1,4-Dichlorobenzene	106-46-7	25	U 25	250	1
04688	3,3'-Dichlorobenzidine	91-94-1	150	U 150	500	1
04688	2,4-Dichlorophenol	120-83-2	25	U 25	250	1
04688	2,4-Dimethylphenol	105-67-9	50	U 50	250	1
04688	3,5-Dimethylphenol	108-68-9	50	U 50	250	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	250	U 250	740	1
04688	2,4-Dinitrophenol	51-28-5	990	U 990	3,000	1
04688	2,4-Dinitrotoluene	121-14-2	50	U 50	250	1
04688	2,6-Dinitrotoluene	606-20-2	25	U 25	250	1
04688	1,2-Diphenylhydrazine	122-66-7	25	U 25	250	1
04688	Hexachlorobenzene	118-74-1	25	U 25	250	1
04688	Hexachlorobutadiene	87-68-3	99	U 99	250	1
04688	Hexachlorocyclopentadiene	77-47-4	250	U 250	740	1
04688	Hexachloroethane	67-72-1	25	U 25	250	1
04688	Isophorone	78-59-1	25	U 25	250	1
04688	2-Methylphenol	95-48-7	50	U 50	250	1
04688	4-Methylphenol	106-44-5	50	U 50	250	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	25	U 25	250	1
04688	3-Nitroaniline	99-09-2	50	U 50	250	1
04688	4-Nitroaniline	100-01-6	99	U 99	250	1
04688	Nitrobenzene	98-95-3	25	U 25	250	1
04688	2-Nitrophenol	88-75-5	25	U 25	250	1
04688	4-Nitrophenol	100-02-7	250	U 250	740	1
04688	N-Nitroso-di-n-propylamine	621-64-7	25	U 25	250	1
04688	N-Nitrosodiphenylamine	86-30-6	25	U 25	250	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	250	U 250	740	1
04688	Phenol	108-95-2	25	U 25	250	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD008 SDG#: DE046-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	25 U	25	250	1
04688	2,4,5-Trichlorophenol	95-95-4	50 U	50	250	1
04688	2,4,6-Trichlorophenol	88-06-2	50 U	50	250	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.99 U	0.99	2.5	1
10138	Acenaphthylene	208-96-8	0.50 U	0.50	2.5	1
10138	Anthracene	120-12-7	0.51 J	0.50	2.5	1
10138	Benzo(a)anthracene	56-55-3	1.6 J	0.99	2.5	1
10138	Benzo(a)pyrene	50-32-8	1.4 J	0.99	2.5	1
10138	Benzo(b)fluoranthene	205-99-2	3.4	0.99	2.5	1
10138	Benzo(g,h,i)perylene	191-24-2	2.0 J	0.99	2.5	1
10138	Benzo(k)fluoranthene	207-08-9	1.2 J	0.99	2.5	1
10138	Butylbenzylphthalate	85-68-7	9.9 J	8.9	27	1
10138	Di-n-butylphthalate	84-74-2	8.9 U	8.9	27	1
10138	Chrysene	218-01-9	8.6	0.50	2.5	1
10138	Dibenz(a,h)anthracene	53-70-3	0.99 U	0.99	2.5	1
10138	Diethylphthalate	84-66-2	8.9 U	8.9	27	1
10138	Dimethylphthalate	131-11-3	8.9 U	8.9	27	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	69	8.9	27	1
10138	Fluoranthene	206-44-0	3.2	0.99	2.5	1
10138	Fluorene	86-73-7	0.99 U	0.99	2.5	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.2 J	0.99	2.5	1
10138	1-Methylnaphthalene	90-12-0	2.2 J	0.99	2.5	1
10138	2-Methylnaphthalene	91-57-6	2.1 J	0.99	2.5	1
10138	Naphthalene	91-20-3	4.4	0.99	2.5	1
10138	N-Nitrosodimethylamine	62-75-9	0.99 U	0.99	2.5	1
10138	Di-n-octylphthalate	117-84-0	8.9 U	8.9	27	1
10138	Phenanthrene	85-01-8	4.1	0.99	2.5	1
10138	Pyrene	129-00-0	3.1	0.99	2.5	1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.8 U	1.8	5.3	1
10401	Dalapon	75-99-0	6.5 U	6.5	13	1
10401	2,4-DB	94-82-6	3.4 U	3.4	3.4	1
10401	Dicamba	1918-00-9	0.59 U	0.59	1.8	1
10401	Dinoseb	88-85-7	1.2 U	1.2	3.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.2 U	1.2	2.5	1
10401	MCPA	94-74-6	240 U	240	370	1
10401	MCPP (Mecoprop)	93-65-2	140 U	140	370	1
10401	2,4,5-T	93-76-5	0.12 U	0.12	0.25	1
10401	2,4,5-TP	93-72-1	0.11 U	0.11	0.25	1

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and MCPA.

Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD008 SDG#: DE046-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.098 U	0.098	0.25	1
01363	Alpha BHC	319-84-6	0.051 U	0.051	0.25	1
01363	Beta BHC	319-85-7	0.089 U	0.089	0.25	1
01363	Gamma BHC - Lindane	58-89-9	0.051 U	0.051	0.25	1
01363	Chlordane	57-74-9	1.2 U	1.2	5.1	1
01363	p,p-DDD	72-54-8	0.098 U	0.098	0.51	1
01363	p,p-DDE	72-55-9	2.8 U	2.8	2.8	1
01363	p,p-DDT	50-29-3	10	0.49	2.5	5
01363	Delta BHC	319-86-8	0.053 U	0.053	0.25	1
01363	Dieldrin	60-57-1	0.64 U	0.64	0.64	1
01363	Endosulfan I	959-98-8	0.065 U	0.065	0.25	1
01363	Endosulfan II	33213-65-9	0.79 U	0.79	0.79	1
01363	Endosulfan Sulfate	1031-07-8	0.098 U	0.098	0.51	1
01363	Endrin	72-20-8	0.98 U	0.98	0.98	1
01363	Endrin Aldehyde	7421-93-4	0.46 U	0.46	0.51	1
01363	Endrin Ketone	53494-70-5	0.098 U	0.098	0.51	1
01363	Heptachlor	76-44-8	0.089 U	0.089	0.25	1
01363	Heptachlor Epoxide	1024-57-3	0.64 U	0.64	0.64	1
01363	Methoxychlor	72-43-5	0.51 U	0.51	2.5	1
01363	Mirex	2385-85-5	0.098 U	0.098	0.51	1
01363	Toxaphene	8001-35-2	3.3 U	3.3	9.8	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	15 U	15	49	10
10225	Aroclor 5442	12642-23-8	15 U	15	49	10
10225	Aroclor 5460	11126-42-4	15 U	15	49	10
10225	PCB-1016	12674-11-2	4.9 U	4.9	25	10
10225	PCB-1221	11104-28-2	7.4 U	7.4	25	10
10225	PCB-1232	11141-16-5	7.7 U	7.7	25	10
10225	PCB-1242	53469-21-9	7.4 U	7.4	25	10
10225	PCB-1248	12672-29-6	4.9 U	4.9	25	10
10225	PCB-1254	11097-69-1	300	4.9	25	10
10225	PCB-1260	11096-82-5	4.9 U	4.9	25	10
10225	PCB-1262	37324-23-5	4.9 U	4.9	25	10
10225	PCB-1268	11100-14-4	4.9 U	4.9	25	10

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	12,800	7.12	28.3	1
07914	Boron	7440-42-8	6.76 J	1.26	7.08	1
01650	Calcium	7440-70-2	3,610	8.67	28.3	1
01654	Iron	7439-89-6	19,500	6.67	28.3	1
01656	Lithium	7439-93-2	23.9	0.31	2.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD008 SDG#: DE046-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	4,440	3.59	14.2	1
06958	Manganese	7439-96-5	293	0.110	0.708	1
10145	Phosphorus	7723-14-0	415	0.792	14.2	1
01662	Potassium	7440-09-7	3,590	25.5	70.8	1
01667	Sodium	7440-23-5	82.4 J	52.8	142	1
07968	Strontium	7440-24-6	19.3	0.0877	0.708	1
06969	Tin	7440-31-5	2.87 J	1.42	14.2	1
06970	Titanium	7440-32-6	1,110	0.538	1.42	1
10146	Zirconium	7440-67-7	1.44 J	1.19	7.08	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.109 J	0.0892	0.297	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	12.9	0.0892	0.594	2
06126	Barium	7440-39-3	89.9	0.160	0.594	2
06127	Beryllium	7440-41-7	0.499	0.0238	0.149	2
06128	Cadmium	7440-43-9	0.238	0.0535	0.149	2
06131	Chromium	7440-47-3	16.3	0.178	0.594	2
06132	Cobalt	7440-48-4	5.85	0.0297	0.149	2
06133	Copper	7440-50-8	10.2	0.0981	0.594	2
06135	Lead	7439-92-1	16.9	0.0155	0.297	2
06138	Molybdenum	7439-98-7	0.508	0.0743	0.149	2
06139	Nickel	7440-02-0	12.3	0.149	0.594	2
06141	Selenium	7782-49-2	0.199 J	0.0594	0.594	2
06142	Silver	7440-22-4	0.0811 J	0.0178	0.149	2
06145	Thallium	7440-28-0	0.268	0.0446	0.149	2
06148	Vanadium	7440-62-2	31.2	0.0327	0.149	2
06149	Zinc	7440-66-6	67.9	0.832	4.46	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.106 J	0.0043	0.148	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.7	1.2	1.5	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	29.4 J	13.4	44.6	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.30 U	0.30	1.5	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	505	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					

*=This limit was used in the evaluation of the final result

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD008 SDG#: DE046-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.59	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	32.7	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/19/2011 00:18	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/12/2011 11:11	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/07/2011 01:37	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/15/2011 00:04	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/22/2011 23:15	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 22:23	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD008 SDG#: DE046-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:50	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:18	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:18	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:48	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:15	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 02:34	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 03:52	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 16:35	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD034 SDG#: DE046-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U 210	640	1
04688	Benzidine	92-87-5	1,500	U 1,500	4,300	1
04688	Benzoic acid	65-85-0	210	U 210	640	1
04688	Benzyl alcohol	100-51-6	210	U 210	640	1
04688	4-Bromophenyl-phenylether	101-55-3	21	U 21	210	1
04688	Butylbenzylphthalate	85-68-7	32	J 21	210	1
04688	Carbazole	86-74-8	21	U 21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	43	U 43	210	1
04688	4-Chloroaniline	106-47-8	86	U 86	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U 21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U 21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U 21	210	1
04688	2-Chloronaphthalene	91-58-7	21	U 21	210	1
04688	2-Chlorophenol	95-57-8	21	U 21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	43	U 43	210	1
04688	Dibenzofuran	132-64-9	21	U 21	210	1
04688	1,2-Dichlorobenzene	95-50-1	21	U 21	210	1
04688	1,3-Dichlorobenzene	541-73-1	21	U 21	210	1
04688	1,4-Dichlorobenzene	106-46-7	21	U 21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U 130	430	1
04688	2,4-Dichlorophenol	120-83-2	21	U 21	210	1
04688	2,4-Dimethylphenol	105-67-9	43	U 43	210	1
04688	3,5-Dimethylphenol	108-68-9	43	U 43	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U 210	640	1
04688	2,4-Dinitrophenol	51-28-5	860	U 860	2,600	1
04688	2,4-Dinitrotoluene	121-14-2	43	U 43	210	1
04688	2,6-Dinitrotoluene	606-20-2	21	U 21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	21	U 21	210	1
04688	Hexachlorobenzene	118-74-1	21	U 21	210	1
04688	Hexachlorobutadiene	87-68-3	86	U 86	210	1
04688	Hexachlorocyclopentadiene	77-47-4	210	U 210	640	1
04688	Hexachloroethane	67-72-1	21	U 21	210	1
04688	Isophorone	78-59-1	21	U 21	210	1
04688	2-Methylphenol	95-48-7	43	U 43	210	1
04688	4-Methylphenol	106-44-5	43	U 43	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	21	U 21	210	1
04688	3-Nitroaniline	99-09-2	43	U 43	210	1
04688	4-Nitroaniline	100-01-6	86	U 86	210	1
04688	Nitrobenzene	98-95-3	21	U 21	210	1
04688	2-Nitrophenol	88-75-5	21	U 21	210	1
04688	4-Nitrophenol	100-02-7	210	U 210	640	1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U 21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	21	U 21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	210	U 210	640	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD034 SDG#: DE046-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	21 U	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	21 U	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	43 U	43	210	1
04688	2,4,6-Trichlorophenol	88-06-2	43 U	43	210	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.86 U	0.86	2.1	1
10138	Acenaphthylene	208-96-8	0.43 U	0.43	2.1	1
10138	Anthracene	120-12-7	0.43 U	0.43	2.1	1
10138	Benzo(a)anthracene	56-55-3	1.2 J	0.86	2.1	1
10138	Benzo(a)pyrene	50-32-8	2.3	0.86	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	5.0	0.86	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	2.3	0.86	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	2.6	0.86	2.1	1
10138	Di-n-butylphthalate	84-74-2	7.7 U	7.7	23	1
10138	Chrysene	218-01-9	4.5	0.43	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	0.86 U	0.86	2.1	1
10138	Diethylphthalate	84-66-2	7.7 U	7.7	23	1
10138	Dimethylphthalate	131-11-3	7.7 U	7.7	23	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	29	7.7	23	1
10138	Fluoranthene	206-44-0	3.7	0.86	2.1	1
10138	Fluorene	86-73-7	3.4	0.86	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.8 J	0.86	2.1	1
10138	1-Methylnaphthalene	90-12-0	0.86 U	0.86	2.1	1
10138	2-Methylnaphthalene	91-57-6	0.86 U	0.86	2.1	1
10138	Naphthalene	91-20-3	1.1 J	0.86	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	0.86 U	0.86	2.1	1
10138	Di-n-octylphthalate	117-84-0	7.7 U	7.7	23	1
10138	Phenanthrene	85-01-8	2.0 J	0.86	2.1	1
10138	Pyrene	129-00-0	3.5	0.86	2.1	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.5 U	1.5	4.6	1
10401	Dalapon	75-99-0	5.7 U	5.7	12	1
10401	2,4-DB	94-82-6	1.2 U	1.2	2.2	1
10401	Dicamba	1918-00-9	0.51 U	0.51	1.5	1
10401	Dinoseb	88-85-7	1.0 U	1.0	3.1	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0 U	1.0	2.2	1
10401	MCPA	94-74-6	98 U	98	320	1
10401	MCPP (Mecoprop)	93-65-2	96 U	96	320	1
10401	2,4,5-T	93-76-5	0.11 U	0.11	0.22	1
10401	2,4,5-TP	93-72-1	0.096 U	0.096	0.22	1
When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD034 SDG#: DE046-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.085 U	0.085	0.21	1
01363	Alpha BHC	319-84-6	0.044 U	0.044	0.21	1
01363	Beta BHC	319-85-7	0.077 U	0.077	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.044 U	0.044	0.21	1
01363	Chlordane	57-74-9	1.0 U	1.0	4.4	1
01363	p,p-DDD	72-54-8	0.085 U	0.085	0.44	1
01363	p,p-DDE	72-55-9	0.25 U	0.25	0.44	1
01363	p,p-DDT	50-29-3	0.37 U	0.37	0.44	1
01363	Delta BHC	319-86-8	0.046 U	0.046	0.21	1
01363	Dieldrin	60-57-1	0.085 U	0.085	0.44	1
01363	Endosulfan I	959-98-8	0.057 U	0.057	0.21	1
01363	Endosulfan II	33213-65-9	0.085 U	0.085	0.44	1
01363	Endosulfan Sulfate	1031-07-8	0.29 U	0.29	0.44	1
01363	Endrin	72-20-8	0.085 U	0.085	0.44	1
01363	Endrin Aldehyde	7421-93-4	0.085 U	0.085	0.44	1
01363	Endrin Ketone	53494-70-5	0.085 U	0.085	0.44	1
01363	Heptachlor	76-44-8	0.077 U	0.077	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.044 U	0.044	0.21	1
01363	Methoxychlor	72-43-5	0.44 U	0.44	2.1	1
01363	Mirex	2385-85-5	0.36 U	0.36	0.44	1
01363	Toxaphene	8001-35-2	2.8 U	2.8	8.5	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.3 U	1.3	4.2	1
10225	Aroclor 5442	12642-23-8	1.3 U	1.3	4.2	1
10225	Aroclor 5460	11126-42-4	1.5 J	1.3	4.2	1
10225	PCB-1016	12674-11-2	0.42 U	0.42	2.2	1
10225	PCB-1221	11104-28-2	0.64 U	0.64	2.2	1
10225	PCB-1232	11141-16-5	0.67 U	0.67	2.2	1
10225	PCB-1242	53469-21-9	0.64 U	0.64	2.2	1
10225	PCB-1248	12672-29-6	0.42 U	0.42	2.2	1
10225	PCB-1254	11097-69-1	1.7 J	0.42	2.2	1
10225	PCB-1260	11096-82-5	1.3 J	0.42	2.2	1
10225	PCB-1262	37324-23-5	0.42 U	0.42	2.2	1
10225	PCB-1268	11100-14-4	0.42 U	0.42	2.2	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	8,990	6.34	25.2	1
07914	Boron	7440-42-8	5.57 J	1.12	6.30	1
01650	Calcium	7440-70-2	2,330	7.72	25.2	1
01654	Iron	7439-89-6	15,700	5.94	25.2	1
01656	Lithium	7439-93-2	22.6	0.28	2.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD034 SDG#: DE046-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	3,960	3.20	12.6	1
06958	Manganese	7439-96-5	218	0.0983	0.630	1
10145	Phosphorus	7723-14-0	404	0.706	12.6	1
01662	Potassium	7440-09-7	2,630	22.7	63.0	1
01667	Sodium	7440-23-5	56.6 J	47.0	126	1
07968	Strontium	7440-24-6	8.22	0.0781	0.630	1
06969	Tin	7440-31-5	2.65 J	1.26	12.6	1
06970	Titanium	7440-32-6	826	0.479	1.26	1
10146	Zirconium	7440-67-7	1.06 U	1.06	6.30	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0742 U	0.0742	0.247	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.30	0.0742	0.494	2
06126	Barium	7440-39-3	76.1	0.133	0.494	2
06127	Beryllium	7440-41-7	0.459	0.0198	0.124	2
06128	Cadmium	7440-43-9	0.167	0.0445	0.124	2
06131	Chromium	7440-47-3	13.0	0.148	0.494	2
06132	Cobalt	7440-48-4	4.99	0.0247	0.124	2
06133	Copper	7440-50-8	6.53	0.0816	0.494	2
06135	Lead	7439-92-1	12.7	0.0129	0.247	2
06138	Molybdenum	7439-98-7	0.357	0.0618	0.124	2
06139	Nickel	7440-02-0	9.34	0.124	0.494	2
06141	Selenium	7782-49-2	0.143 J	0.0494	0.494	2
06142	Silver	7440-22-4	0.0249 J	0.0148	0.124	2
06145	Thallium	7440-28-0	0.252	0.0371	0.124	2
06148	Vanadium	7440-62-2	27.7	0.0272	0.124	2
06149	Zinc	7440-66-6	93.8	0.692	3.71	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0035 U	0.0035	0.121	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0	1.0	1.3	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.6 U	11.6	38.6	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.26 U	0.26	1.3	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	513	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD034 SDG#: DE046-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.61	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	22.2	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/19/2011 00:53	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/12/2011 12:15	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/07/2011 02:05	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/15/2011 00:18	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	01/05/2011 17:57	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD034 SDG#: DE046-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:54	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:21	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:21	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:18	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 02:53	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 04:15	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 16:48	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD037 SDG#: DE046-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	230	U 230	700	1
04688	Benzidine	92-87-5	1,600	U 1,600	4,700	1
04688	Benzoic acid	65-85-0	230	U 230	700	1
04688	Benzyl alcohol	100-51-6	230	U 230	700	1
04688	4-Bromophenyl-phenylether	101-55-3	23	U 23	230	1
04688	Carbazole	86-74-8	23	U 23	230	1
04688	4-Chloro-3-methylphenol	59-50-7	47	U 47	230	1
04688	4-Chloroaniline	106-47-8	93	U 93	230	1
04688	bis(2-Chloroethoxy)methane	111-91-1	23	U 23	230	1
04688	bis(2-Chloroethyl)ether	111-44-4	23	U 23	230	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	23	U 23	230	1
04688	2-Chloronaphthalene	91-58-7	23	U 23	230	1
04688	2-Chlorophenol	95-57-8	23	U 23	230	1
04688	4-Chlorophenyl-phenylether	7005-72-3	47	U 47	230	1
04688	Dibenzofuran	132-64-9	23	U 23	230	1
04688	1,2-Dichlorobenzene	95-50-1	23	U 23	230	1
04688	1,3-Dichlorobenzene	541-73-1	23	U 23	230	1
04688	1,4-Dichlorobenzene	106-46-7	23	U 23	230	1
04688	3,3'-Dichlorobenzidine	91-94-1	140	U 140	470	1
04688	2,4-Dichlorophenol	120-83-2	23	U 23	230	1
04688	2,4-Dimethylphenol	105-67-9	47	U 47	230	1
04688	3,5-Dimethylphenol	108-68-9	47	U 47	230	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	230	U 230	700	1
04688	2,4-Dinitrophenol	51-28-5	930	U 930	2,800	1
04688	2,4-Dinitrotoluene	121-14-2	47	U 47	230	1
04688	2,6-Dinitrotoluene	606-20-2	23	U 23	230	1
04688	1,2-Diphenylhydrazine	122-66-7	23	U 23	230	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	35	J 23	470	1
04688	Hexachlorobenzene	118-74-1	23	U 23	230	1
04688	Hexachlorobutadiene	87-68-3	93	U 93	230	1
04688	Hexachlorocyclopentadiene	77-47-4	230	U 230	700	1
04688	Hexachloroethane	67-72-1	23	U 23	230	1
04688	Isophorone	78-59-1	23	U 23	230	1
04688	2-Methylphenol	95-48-7	47	U 47	230	1
04688	4-Methylphenol	106-44-5	47	U 47	230	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	23	U 23	230	1
04688	3-Nitroaniline	99-09-2	47	U 47	230	1
04688	4-Nitroaniline	100-01-6	93	U 93	230	1
04688	Nitrobenzene	98-95-3	23	U 23	230	1
04688	2-Nitrophenol	88-75-5	23	U 23	230	1
04688	4-Nitrophenol	100-02-7	230	U 230	700	1
04688	N-Nitroso-di-n-propylamine	621-64-7	23	U 23	230	1
04688	N-Nitrosodiphenylamine	86-30-6	23	U 23	230	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	230	U 230	700	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD037 SDG#: DE046-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	23 U	23	230	1
04688	1,2,4-Trichlorobenzene	120-82-1	23 U	23	230	1
04688	2,4,5-Trichlorophenol	95-95-4	47 U	47	230	1
04688	2,4,6-Trichlorophenol	88-06-2	47 U	47	230	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.93 U	0.93	2.3	1
10138	Acenaphthylene	208-96-8	0.71 J	0.47	2.3	1
10138	Anthracene	120-12-7	1.1 J	0.47	2.3	1
10138	Benzo(a)anthracene	56-55-3	4.9	0.93	2.3	1
10138	Benzo(a)pyrene	50-32-8	6.0	0.93	2.3	1
10138	Benzo(b)fluoranthene	205-99-2	13	0.93	2.3	1
10138	Benzo(g,h,i)perylene	191-24-2	4.5	0.93	2.3	1
10138	Benzo(k)fluoranthene	207-08-9	4.8	0.93	2.3	1
10138	Butylbenzylphthalate	85-68-7	8.4 U	8.4	25	1
10138	Di-n-butylphthalate	84-74-2	8.4 U	8.4	25	1
10138	Chrysene	218-01-9	10	0.47	2.3	1
10138	Dibenz(a,h)anthracene	53-70-3	0.93 U	0.93	2.3	1
10138	Diethylphthalate	84-66-2	8.4 U	8.4	25	1
10138	Dimethylphthalate	131-11-3	8.4 U	8.4	25	1
10138	Fluoranthene	206-44-0	8.3	0.93	2.3	1
10138	Fluorene	86-73-7	3.5	0.93	2.3	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.4	0.93	2.3	1
10138	1-Methylnaphthalene	90-12-0	2.6	0.93	2.3	1
10138	2-Methylnaphthalene	91-57-6	3.1	0.93	2.3	1
10138	Naphthalene	91-20-3	5.9	0.93	2.3	1
10138	N-Nitrosodimethylamine	62-75-9	0.93 U	0.93	2.3	1
10138	Di-n-octylphthalate	117-84-0	8.4 U	8.4	25	1
10138	Phenanthrene	85-01-8	6.0	0.93	2.3	1
10138	Pyrene	129-00-0	7.8	0.93	2.3	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.7 U	1.7	5.0	1
10401	Dalapon	75-99-0	6.1 U	6.1	13	1
10401	2,4-DB	94-82-6	1.4 U	1.4	2.4	1
10401	Dicamba	1918-00-9	0.56 U	0.56	1.7	1
10401	Dinoseb	88-85-7	1.1 U	1.1	3.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.1 U	1.1	2.4	1
10401	MCPA	94-74-6	110 U	110	350	1
10401	MCPP (Mecoprop)	93-65-2	390	100	350	1
10401	2,4,5-T	93-76-5	0.11 U	0.11	0.24	1
10401	2,4,5-TP	93-72-1	0.10 U	0.10	0.24	1
When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		

*=This limit was used in the evaluation of the final result

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD037 SDG#: DE046-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.15 U	0.15	0.23	1
01363	Alpha BHC	319-84-6	0.047 U	0.047	0.23	1
01363	Beta BHC	319-85-7	0.084 U	0.084	0.23	1
01363	Gamma BHC - Lindane	58-89-9	0.047 U	0.047	0.23	1
01363	Chlordane	57-74-9	9.6 U	9.6	9.6	1
01363	p,p-DDD	72-54-8	0.092 U	0.092	0.47	1
01363	p,p-DDE	72-55-9	2.7	0.46	2.4	5
01363	p,p-DDT	50-29-3	3.7	0.46	2.4	5
01363	Delta BHC	319-86-8	0.050 U	0.050	0.23	1
01363	Dieldrin	60-57-1	0.49 U	0.49	0.49	1
01363	Endosulfan I	959-98-8	0.061 U	0.061	0.23	1
01363	Endosulfan II	33213-65-9	0.11 U	0.11	0.47	1
01363	Endosulfan Sulfate	1031-07-8	0.092 U	0.092	0.47	1
01363	Endrin	72-20-8	0.36 U	0.36	0.47	1
01363	Endrin Aldehyde	7421-93-4	1.2 U	1.2	1.2	1
01363	Endrin Ketone	53494-70-5	0.092 U	0.092	0.47	1
01363	Heptachlor	76-44-8	0.16 U	0.16	0.23	1
01363	Heptachlor Epoxide	1024-57-3	0.29 U	0.29	0.29	1
01363	Methoxychlor	72-43-5	0.47 U	0.47	2.3	1
01363	Mirex	2385-85-5	0.25 U	0.25	0.47	1
01363	Toxaphene	8001-35-2	3.1 U	3.1	9.2	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.8 U	2.8	9.2	2
10225	Aroclor 5442	12642-23-8	2.8 U	2.8	9.2	2
10225	Aroclor 5460	11126-42-4	140	2.8	9.2	2
10225	PCB-1016	12674-11-2	0.92 U	0.92	4.7	2
10225	PCB-1221	11104-28-2	1.4 U	1.4	4.7	2
10225	PCB-1232	11141-16-5	1.5 U	1.5	4.7	2
10225	PCB-1242	53469-21-9	1.4 U	1.4	4.7	2
10225	PCB-1248	12672-29-6	0.92 U	0.92	4.7	2
10225	PCB-1254	11097-69-1	88	0.92	4.7	2
10225	PCB-1260	11096-82-5	0.92 U	0.92	4.7	2
10225	PCB-1262	37324-23-5	0.92 U	0.92	4.7	2
10225	PCB-1268	11100-14-4	0.92 U	0.92	4.7	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,100	6.89	27.4	1
07914	Boron	7440-42-8	8.62	1.22	6.85	1
01650	Calcium	7440-70-2	4,920	8.39	27.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD037 SDG#: DE046-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	18,600	6.45	27.4	1
01656	Lithium	7439-93-2	20.8	0.30	2.7	1
01657	Magnesium	7439-95-4	4,530	3.48	13.7	1
06958	Manganese	7439-96-5	306	0.107	0.685	1
10145	Phosphorus	7723-14-0	449	0.767	13.7	1
01662	Potassium	7440-09-7	3,310	24.6	68.5	1
01667	Sodium	7440-23-5	121 J	51.1	137	1
07968	Strontium	7440-24-6	27.0	0.0849	0.685	1
06969	Tin	7440-31-5	3.42 J	1.37	13.7	1
06970	Titanium	7440-32-6	1,030	0.520	1.37	1
10146	Zirconium	7440-67-7	1.54 J	1.15	6.85	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.249 J	0.0798	0.266	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	5.93	0.0798	0.532	2
06126	Barium	7440-39-3	124	0.144	0.532	2
06127	Beryllium	7440-41-7	0.677	0.0213	0.133	2
06128	Cadmium	7440-43-9	0.397	0.0479	0.133	2
06131	Chromium	7440-47-3	23.8	0.160	0.532	2
06132	Cobalt	7440-48-4	7.03	0.0266	0.133	2
06133	Copper	7440-50-8	12.8	0.0878	0.532	2
06135	Lead	7439-92-1	49.0	0.0138	0.266	2
06138	Molybdenum	7439-98-7	0.676	0.0665	0.133	2
06139	Nickel	7440-02-0	18.6	0.133	0.532	2
06141	Selenium	7782-49-2	0.266 J	0.0532	0.532	2
06142	Silver	7440-22-4	0.127 J	0.0160	0.133	2
06145	Thallium	7440-28-0	0.321	0.0399	0.133	2
06148	Vanadium	7440-62-2	46.2	0.0293	0.133	2
06149	Zinc	7440-66-6	238	0.745	3.99	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0210 J	0.0038	0.131	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.4	1.1	1.4	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	12.6 U	12.6	41.9	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.63 J	0.28	1.4	1
	ASTM D1498		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	583	10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD037 SDG#: DE046-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.		mV	mV	mV	
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.30	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	28.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/19/2011 01:29	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/12/2011 12:47	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/07/2011 02:33	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/15/2011 00:46	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/25/2011 03:09	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 23:00	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/01/2011 10:44

SD037 SDG#: DE046-07*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 15:04	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:24	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:24	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:51	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:20	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 03:11	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 04:38	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 17:06	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:44 AM

Group Number: 1226677

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10362SLF026	Sample number(s): 6172036-6172040, 6172042-6172045								
Acenaphthene	17	U	17.	170	ug/kg	92	76-111		
Acenaphthylene	17	U	17.	170	ug/kg	95	75-122		
Aniline	170		170.	500	ug/kg	37	10-107		
	U								
Anthracene	17	U	17.	170	ug/kg	94	76-112		
Benzidine	1,200		1,200.	3,300	ug/kg	34	15-121		
	U								
Benzo(a)anthracene	17	U	17.	170	ug/kg	92	73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	82	69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	80	61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	77	65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	80	67-125		
Benzoic acid	170		170.	500	ug/kg	92	10-154		
	U								
Benzyl alcohol	170		170.	500	ug/kg	86	68-111		
	U								
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	90	79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	94	75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	90	79-112		
Carbazole	17	U	17.	170	ug/kg	94	77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	92	74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	37	10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	95	70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	86	70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	86	68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	77	67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	91	72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	93	79-110		
Chrysene	17	U	17.	170	ug/kg	90	76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	79	70-128		
Dibenzofuran	17	U	17.	170	ug/kg	92	79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	89	79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	86	70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	87	74-106		
3,3'-Dichlorobenzidine	100		100.	330	ug/kg	39	38-105		
	U								
2,4-Dichlorophenol	17	U	17.	170	ug/kg	94	75-111		
Diethylphthalate	17	U	17.	170	ug/kg	91	76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	95	72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	105	70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	91	77-109		
4,6-Dinitro-2-methylphenol	170		170.	500	ug/kg	80	53-110		
	U								
2,4-Dinitrophenol	670		670.	2,000	ug/kg	77	37-120		
	U								
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	95	73-115		

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:44 AM

Group Number: 1226677

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	97		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	99		77-111		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	92		75-117		
Fluoranthene	17 U	17.	170	ug/kg	94		78-116		
Fluorene	17 U	17.	170	ug/kg	93		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	93		78-116		
Hexachlorobutadiene	67 U	67.	170	ug/kg	97		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	106		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	91		68-105		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	79		64-119		
Isophorone	17 U	17.	170	ug/kg	92		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	91		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	86		76-105		
2-Methylphenol	33 U	33.	170	ug/kg	87		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	88		66-117		
Naphthalene	17 U	17.	170	ug/kg	89		73-106		
2-Nitroaniline	17 U	17.	170	ug/kg	100		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	82		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	61		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	96		71-104		
2-Nitrophenol	17 U	17.	170	ug/kg	94		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	96		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	86		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	76		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	94		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	81		68-130		
Pentachlorophenol	170 U	170.	500	ug/kg	80		35-106		
Phenanthrene	17 U	17.	170	ug/kg	91		77-113		
Phenol	17 U	17.	170	ug/kg	90		58-112		
Pyrene	17 U	17.	170	ug/kg	92		75-115		
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	94		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	97		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	101		78-111		
Batch number: 10362SLK026 Sample number(s): 6172036-6172040, 6172042-6172045									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	93		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	95		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	101		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	100		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	95		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	98		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	99		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	101		66-137		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	111		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	112		84-132		
Chrysene	0.33 U	0.33	1.7	ug/kg	93		79-120		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	99		62-142		
Diethylphthalate	6.0 U	6.0	18	ug/kg	102		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	103		70-130		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	110		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	99		78-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	98		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	100		62-141		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	92		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	83		62-120		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:44 AM

Group Number: 1226677

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67 U	0.67	1.7	ug/kg	91		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	94		39-148		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	112		55-176		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	93		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	96		56-121		

Batch number: 103650019A	Sample number(s): 6172036-6172040, 6172042-6172045								
2,4-D	1.2 U	1.2	3.6	ug/kg	105		40-140		
Dalapon	4.4 U	4.4	9.0	ug/kg	91*		24-89		
2,4-DB	0.62 U	0.62	1.7	ug/kg	88		34-138		
Dicamba	0.40 U	0.40	1.2	ug/kg	87		20-164		
Dinoseb	0.80 U	0.80	2.4	ug/kg	12		10-36		
2,4-DP (Dichlorprop)	0.80 U	0.80	1.7	ug/kg	107		60-141		
MCPA	76 U	76.	250	ug/kg	96		34-113		
MCPP (Mecoprop)	75 U	75.	250	ug/kg	97		29-154		
2,4,5-T	0.082 U	0.082	0.17	ug/kg	95		33-145		
2,4,5-TP	0.075 U	0.075	0.17	ug/kg	93		48-138		

Batch number: 103560035A	Sample number(s): 6172036-6172040, 6172042-6172045								
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	69*	53*	75-125	26	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	81		72-120		
PCB-1221	0.50 U	0.50	1.7	ug/kg					
PCB-1232	0.52 U	0.52	1.7	ug/kg					
PCB-1242	0.50 U	0.50	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.33 U	0.33	1.7	ug/kg	124		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					

Batch number: 103630018A	Sample number(s): 6172036-6172040, 6172042-6172045								
Aldrin	0.066 U	0.066	0.17	ug/kg	124		44-135		
Alpha BHC	0.034 U	0.034	0.17	ug/kg	82		38-130		
Beta BHC	0.060 U	0.060	0.17	ug/kg	113		56-134		
Gamma BHC - Lindane	0.034 U	0.034	0.17	ug/kg	88		46-127		
Chlordane	0.80 U	0.80	3.4	ug/kg					
p,p-DDD	0.066 U	0.066	0.34	ug/kg	85		60-137		
p,p-DDE	0.066 U	0.066	0.34	ug/kg	123		59-141		
p,p-DDT	0.066 U	0.066	0.34	ug/kg	85		54-130		
Delta BHC	0.036 U	0.036	0.17	ug/kg	103		55-144		
Dieldrin	0.066 U	0.066	0.34	ug/kg	91		65-129		
Endosulfan I	0.044 U	0.044	0.17	ug/kg	85		45-123		
Endosulfan II	0.066 U	0.066	0.34	ug/kg	115		63-127		
Endosulfan Sulfate	0.066 U	0.066	0.34	ug/kg	123		72-138		
Endrin	0.066 U	0.066	0.34	ug/kg	92		62-129		
Endrin Aldehyde	0.066 U	0.066	0.34	ug/kg	95		55-132		
Endrin Ketone	0.066 U	0.066	0.34	ug/kg	111		69-139		
Heptachlor	0.060 U	0.060	0.17	ug/kg	91		43-124		
Heptachlor Epoxide	0.034 U	0.034	0.17	ug/kg	136*		65-131		
Methoxychlor	0.34 U	0.34	1.7	ug/kg	95		59-125		
Mirex	0.066 U	0.066	0.34	ug/kg					
Toxaphene	2.2 U	2.2	6.6	ug/kg					

Batch number: 103621026001A	Sample number(s): 6172036-6172045								
Antimony	0.0594 U	0.0594	0.198	mg/kg	61		11-208		
Arsenic	0.0594 U	0.0594	0.396	mg/kg	99		80-120		

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:44 AM

Group Number: 1226677

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Beryllium	0.0158 U	0.0158	0.0990	mg/kg	104		82-118		
Cadmium	0.0356 U	0.0356	0.0990	mg/kg	99		82-118		
Chromium	0.119 U	0.119	0.396	mg/kg	105		80-120		
Cobalt	0.0198 U	0.0198	0.0990	mg/kg	106		82-118		
Copper	0.0909 J	0.0653	0.396	mg/kg	108		80-120		
Lead	0.0103 U	0.0103	0.198	mg/kg	105		80-120		
Nickel	0.0990 U	0.0990	0.396	mg/kg	106		80-120		
Silver	0.0119 U	0.0119	0.0990	mg/kg	103		66-134		
Thallium	0.0297 U	0.0297	0.0990	mg/kg	104		81-119		
Vanadium	0.0218 U	0.0218	0.0990	mg/kg	93		90-110		
Zinc	0.554 U	0.554	2.97	mg/kg	98		78-122		
Batch number: 103621026001B	Sample number(s): 6172036-6172045								
Selenium	0.0396 U	0.0396	0.396	mg/kg	96		79-122		
Batch number: 103621026001C	Sample number(s): 6172036-6172045								
Molybdenum	0.0495 U	0.0495	0.0990	mg/kg	103		78-122		
Batch number: 103621026001D	Sample number(s): 6172036-6172045								
Barium	0.107 U	0.107	0.396	mg/kg	105		79-121		
Batch number: 103625708002	Sample number(s): 6172036-6172045								
Aluminum	4.93 U	4.93	19.6	mg/kg	97		61-110		
Boron	0.873 U	0.873	4.90	mg/kg	91		78-110		
Calcium	6.01 U	6.01	19.6	mg/kg	101		88-110		
Iron	4.62 U	4.62	19.6	mg/kg	85		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	99		80-120		
Magnesium	2.49 U	2.49	9.80	mg/kg	97		82-110		
Manganese	0.0765 U	0.0765	0.490	mg/kg	97		81-119		
Phosphorus	1.73 J	0.549	9.80	mg/kg	100		80-120		
Potassium	17.6 U	17.6	49.0	mg/kg	100		78-110		
Sodium	36.6 U	36.6	98.0	mg/kg	95		87-110		
Strontium	0.0608 U	0.0608	0.490	mg/kg	102		79-121		
Tin	1.33 J	0.980	9.80	mg/kg	103		90-114		
Titanium	0.373 U	0.373	0.980	mg/kg	84		80-120		
Zirconium	0.824 U	0.824	4.90	mg/kg	100		80-120		
Batch number: 103625711002	Sample number(s): 6172036-6172045								
Mercury	0.0027 U	0.0027	0.0956	mg/kg	99		88-123		
Batch number: 11010010204A	Sample number(s): 6172036-6172039, 6172041-6172045								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	103		85-115		
Batch number: 11010010206A	Sample number(s): 6172036-6172039, 6172041-6172045								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	96		90-110		
Batch number: 11016243202A	Sample number(s): 6172036-6172039, 6172041-6172045								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	99		80-120		
Batch number: 10361039401A	Sample number(s): 6172036-6172038, 6172041-6172045								
22a pH by 9045C					100		95-105		
Batch number: 10361182101A	Sample number(s): 6172036-6172038, 6172041-6172045								
Oxidation Reduction Potential					100		98-102		
Batch number: 11006162401A	Sample number(s): 6172036-6172045								
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		

*- Outside of specification

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- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:44 AM

Group Number: 1226677

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 10362SLF026	Sample number(s): 6172036-6172040, 6172042-6172045 UNSPK: 6172038								
Acenaphthene	90	96	75-115	6	30				
Acenaphthylene	94	100	49-126	7	30				
Aniline	59	68	14-114	15	30				
Anthracene	91	95	75-115	4	30				
Benzidine	35	19*	35-141	57*	30				
Benzo(a)anthracene	93	94	65-122	1	30				
Benzo(a)pyrene	82	83	57-126	1	30				
Benzo(b)fluoranthene	86	86	59-125	0	30				
Benzo(g,h,i)perylene	75	75	59-127	1	30				
Benzo(k)fluoranthene	85	88	56-132	3	30				
Benzoic acid	93	95	10-173	2	30				
Benzyl alcohol	86	89	55-123	4	30				
4-Bromophenyl-phenylether	90	92	67-129	3	30				
Butylbenzylphthalate	102	104	73-134	2	30				
Di-n-butylphthalate	92	94	67-123	2	30				
Carbazole	92	95	64-120	3	30				
4-Chloro-3-methylphenol	90	91	53-130	1	30				
4-Chloroaniline	74	80	23-95	9	30				
bis(2-Chloroethoxy)methane	93	96	54-117	3	30				
bis(2-Chloroethyl)ether	84	84	60-116	0	30				
bis(2-Chloroisopropyl)ether	86	87	55-142	1	30				
2-Chloronaphthalene	78	89	50-141	12	30				
2-Chlorophenol	90	94	73-121	5	30				
4-Chlorophenyl-phenylether	89	96	64-119	7	30				
Chrysene	93	94	62-128	1	30				
Dibenz(a,h)anthracene	80	79	65-125	1	30				
Dibenzofuran	89	95	71-112	7	30				
1,2-Dichlorobenzene	87	89	66-108	2	30				
1,3-Dichlorobenzene	85	87	63-109	3	30				
1,4-Dichlorobenzene	86	88	53-113	3	30				
3,3'-Dichlorobenzidine	77	84	25-123	10	30				
2,4-Dichlorophenol	90	96	78-117	6	30				
Diethylphthalate	90	95	66-118	6	30				
2,4-Dimethylphenol	91	94	56-130	4	30				
3,5-Dimethylphenol	101	104	70-130	3	30				
Dimethylphthalate	90	95	64-118	5	30				
4,6-Dinitro-2-methylphenol	78	76	10-148	3	30				
2,4-Dinitrophenol	68	66	20-143	3	30				
2,4-Dinitrotoluene	93	98	57-114	6	30				
2,6-Dinitrotoluene	91	97	69-123	6	30				
1,2-Diphenylhydrazine	99	101	71-129	2	30				
bis(2-Ethylhexyl)phthalate	101	98	63-122	2	30				
Fluoranthene	92	95	59-122	3	30				
Fluorene	88	95	60-125	7	30				

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:44 AM

Group Number: 1226677

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Hexachlorobenzene	94	96	61-111	2	30				
Hexachlorobutadiene	98	101	62-120	4	30				
Hexachlorocyclopentadiene	79	85	10-153	7	30				
Hexachloroethane	91	94	57-109	4	30				
Indeno(1,2,3-cd)pyrene	78	78	61-126	1	30				
Isophorone	87	92	51-118	5	30				
1-Methylnaphthalene	88	92	73-112	4	30				
2-Methylnaphthalene	83	86	76-114	3	30				
2-Methylphenol	87	90	47-142	4	30				
4-Methylphenol	84	89	55-126	5	30				
Naphthalene	85	90	72-116	6	30				
2-Nitroaniline	102	109	67-125	7	30				
3-Nitroaniline	91	96	59-122	6	30				
4-Nitroaniline	75	91	52-112	20	30				
Nitrobenzene	97	97	51-114	0	30				
2-Nitrophenol	93	94	74-115	1	30				
4-Nitrophenol	99	106	39-133	7	30				
N-Nitroso-di-n-propylamine	86	90	60-116	4	30				
N-Nitrosodimethylamine	73	78	47-116	6	30				
N-Nitrosodiphenylamine	93	97	86-145	4	30				
Di-n-octylphthalate	96	95	56-126	1	30				
Pentachlorophenol	79	80	17-149	1	30				
Phenanthrene	89	92	65-125	3	30				
Phenol	86	93	58-126	8	30				
Pyrene	102	100	51-151	2	30				
1,2,4-Trichlorobenzene	89	96	72-115	7	30				
2,4,5-Trichlorophenol	97	102	34-139	5	30				
2,4,6-Trichlorophenol	100	107	49-140	7	30				
Batch number: 10362SLK026 Sample number(s): 6172036-6172040, 6172042-6172045 UNSPK: 6172038									
Acenaphthene	97	96	63-105	1	30				
Acenaphthylene	93	98	55-126	5	30				
Anthracene	98	94	46-136	4	30				
Benzo(a)anthracene	101	108	39-144	6	30				
Benzo(a)pyrene	95	98	34-156	3	30				
Benzo(b)fluoranthene	106	107	43-155	1	30				
Benzo(g,h,i)perylene	70	63	33-141	9	30				
Benzo(k)fluoranthene	98	106	42-144	8	30				
Butylbenzylphthalate	120	128	73-140	7	30				
Di-n-butylphthalate	111	111	78-160	0	30				
Chrysene	89	93	29-156	4	30				
Dibenz(a,h)anthracene	84	78	41-130	6	30				
Diethylphthalate	102	112	87-131	9	30				
Dimethylphthalate	102	112	74-118	9	30				
Bis(2-Ethylhexyl)phthalate	82	109	39-167	19	30				
Fluoranthene	97	100	26-166	3	30				
Fluorene	98	105	45-121	7	30				
Indeno(1,2,3-cd)pyrene	82	74	21-143	10	30				
1-Methylnaphthalene	94	93	72-123	1	30				
2-Methylnaphthalene	87	86	28-121	1	30				
Naphthalene	94	99	61-102	5	30				
N-Nitrosodimethylamine	101	23*	48-113	126*	30				
Di-n-octylphthalate	88	95	40-192	6	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:44 AM

Group Number: 1226677

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Phenanthrene	93	96	12-165	3	30				
Pyrene	87	92	15-153	5	30				
Batch number: 103650019A Sample number(s): 6172036-6172040, 6172042-6172045 UNSPK: 6172038									
2,4-D	112	118	28-161	5	35				
Dalapon	90*	93*	12-86	3	50				
2,4-DB	108	117	20-170	9	50				
Dicamba	82	67	33-120	19	50				
Dinoseb	12	16	1-44	29	35				
2,4-DP (Dichlorprop)	101	98	55-141	3	50				
MCPA	149	158	31-184	6	50				
MCPP (Mecoprop)	87	92	16-174	6	50				
2,4,5-T	57	59	25-132	4	35				
2,4,5-TP	82	84	10-183	3	35				
Batch number: 103560035A Sample number(s): 6172036-6172040, 6172042-6172045 UNSPK: 6172038									
PCB-1016	104	114	29-146	9	50				
PCB-1260	148	136	39-149	7	50				
Batch number: 103630018A Sample number(s): 6172036-6172040, 6172042-6172045 UNSPK: 6172038									
Aldrin	76	100	16-126	28	50				
Alpha BHC	52	76	10-129	38	50				
Beta BHC	72	59	14-147	19	50				
Gamma BHC - Lindane	58	85	10-140	38	50				
p,p-DDD	82	145	16-163	55*	50				
p,p-DDE	188*	240*	18-161	24	50				
p,p-DDT	129	186*	10-176	36	50				
Delta BHC	69	106	23-140	43	50				
Dieldrin	65	98	19-154	41	50				
Endosulfan I	55	79	16-137	36	50				
Endosulfan II	69	117	28-154	51*	50				
Endosulfan Sulfate	86	122	21-160	34	50				
Endrin	65	102	11-149	44	50				
Endrin Aldehyde	59	114	10-148	63*	35				
Endrin Ketone	64	95	22-165	40	50				
Heptachlor	58	88	13-126	42	50				
Heptachlor Epoxide	82	127	13-157	43	50				
Methoxychlor	59	92	32-147	44	50				
Batch number: 103621026001A Sample number(s): 6172036-6172045 UNSPK: 6172038 BKG: 6172038									
Antimony	40*	45*	75-125	10	20	0.134 J	0.0583 U	200* (1)	20
Arsenic	103	135*	75-125	9	20	4.56	2.95	43*	20
Beryllium	120	115	75-125	3	20	0.525	0.404	26* (1)	20
Cadmium	129*	126*	75-125	2	20	0.181	0.151	18 (1)	20
Chromium	98	95	75-125	1	20	20.5	13.0	45*	20
Cobalt	121	120	75-125	0	20	5.64	3.94	36*	20
Copper	118	109	75-125	4	20	8.92	6.31	34*	20
Lead	141 (2)	47 (2)	75-125	17	20	13.4	10.3	26*	20
Nickel	130*	141*	75-125	4	20	14.2	8.94	46*	20
Silver	125	124	75-125	1	20	0.0395 J	0.0379 J	4 (1)	20
Thallium	129*	121	75-125	4	20	0.290	0.189	42* (1)	20
Vanadium	109	132*	75-125	5	20	35.3	24.7	36*	20
Zinc	101 (2)	144 (2)	75-125	5	20	66.7	45.7	37*	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:44 AM

Group Number: 1226677

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103621026001B Selenium	Sample number(s): 6172036-6172045 90	88	75-125	1	20	UNSPK: 6172038 0.161 J	BKG: 6172038 0.146 J	10 (1)	20
Batch number: 103621026001C Molybdenum	Sample number(s): 6172036-6172045 133*	135*	75-125	2	20	UNSPK: 6172038 0.663	BKG: 6172038 0.433	42* (1)	20
Batch number: 103621026001D Barium	Sample number(s): 6172036-6172045 102 (2)	227 (2)	75-125	11	20	UNSPK: 6172038 91.1	BKG: 6172038 61.8	38*	20
Batch number: 103625708002 Aluminum	Sample number(s): 6172036-6172045 1494 (2)	1284 (2)	75-125	3	20	UNSPK: 6172038 12,300	BKG: 6172038 12,200	0	20
Boron	93	95	84-115	1	20	3.33 J	3.89 J	16 (1)	20
Calcium	169 (2)	147 (2)	75-125	3	20	2,070	2,170	5	20
Iron	543 (2)	-55 (2)	75-125	4	20	15,600	15,400	1	20
Lithium	97	98	82-114	1	20	18.3	18.3	0	20
Magnesium	181 (2)	136 (2)	75-125	2	20	3,580	3,620	1	20
Manganese	107 (2)	96 (2)	75-125	2	20	232	229	1	20
Phosphorus	103	83	75-125	4	20	365	380	4	20
Potassium	101	96	75-125	1	20	2,720	2,570	6	20
Sodium	97	99	75-125	2	20	61.2 J	62.1 J	2 (1)	20
Strontium	97	99	75-115	2	20	12.8	13.3	4	20
Tin	91	91	80-110	1	20	1.88 J	1.78 J	5 (1)	20
Titanium	228 (2)	200 (2)	75-125	2	20	921	892	3	20
Zirconium	90	91	75-125	2	20	0.816 U	1.26 J	200* (1)	20
Batch number: 103625711002 Mercury	Sample number(s): 6172036-6172045 101	101	65-135	0	20	UNSPK: 6172038 0.0250 J	BKG: 6172038 0.0294 J	16 (1)	20
Batch number: 11010010204A 7a Perchlorate EPA 314.0	Sample number(s): 6172036-6172039,6172041-6172045 101		80-120			UNSPK: 6172038 9.0 U	BKG: 6172038 28.9 J	200* (1)	15
Batch number: 11010010206A 11a Anions by 300.0 - Fluoride	Sample number(s): 6172036-6172039,6172041-6172045 62*		80-120			UNSPK: 6172038 2.1	BKG: 6172038 1.2	55* (1)	20
Batch number: 11016243202A 3a Cr VI by EPA 7199	Sample number(s): 6172036-6172039,6172041-6172045 84		75-125			UNSPK: 6172038 0.49 J	BKG: 6172038 0.61 J	22* (1)	20
Batch number: 10361039401A 22a pH by 9045C	Sample number(s): 6172036-6172038,6172041-6172045 6.64					BKG: 6172038 6.50		2*	1
Batch number: 10361182101A Oxidation Reduction Potential	Sample number(s): 6172036-6172038,6172041-6172045 434					BKG: 6172038 430		1	6
Batch number: 11006162401A 28a Moisture Content by 160.3	Sample number(s): 6172036-6172045					BKG: 6172038 19.1		6	20
28a Moisture Content by 160.3						19.1	20.3	6	20
28a Moisture Content by 160.3						19.1	20.3	6	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:44 AM

Group Number: 1226677

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 10362SLF026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6172036	81	82	81	73	82	82
6172037	92	90	100	80	92	97
6172038	84	84	95	84	93	91
6172039	83	82	99	87	87	90
6172040	90	90	107	92	95	88
6172042	79	79	80	73	85	85
6172043	88	85	96	80	92	101
6172044	90	87	94	81	92	99
6172045	87	86	93	81	90	96
Blank	81	81	90	78	87	79
LCS	87	87	100	90	91	83
MS	83	82	99	87	87	90
MSD	90	90	107	92	95	88
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM

Batch number: 10362SLK026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6172036	99	91	89
6172037	95	88	103
6172038	97	86	92
6172039	102	85	92
6172040	99	91	96
6172042	95	87	119
6172043	96	84	84
6172044	90	86	82
6172045	100	90	80
Blank	92	82	94
LCS	95	83	97
MS	102	85	92
MSD	99	91	96
Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 103560035A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6172036	98	108
6172037	99	122*
6172038	108	134*
6172039	110	145*
6172040	102	133*
6172042	86	103
6172043	120	117
6172044	125	157*
6172045	104	118
Blank	105	114

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:44 AM

Group Number: 1226677

Surrogate Quality Control

LCS	96	112
LCSD	91	104
MS	110	145*
MSD	102	133*

Limits:	53-139	45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 103630018A

Tetrachloro-m-xylene	Decachlorobiphenyl

6172036	75	82
6172037	97	270*
6172038	43*	49
6172039	50	65
6172040	80	103
6172042	58	82
6172043	15*	0*
6172044	20*	8*
6172045	71	348*
Blank	66	82
LCS	88	109
MS	50	65
MSD	80	103

Limits:	50-130	20-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 103650019A

2,4-Dichlorophenylacetic
acid

6172036	82
6172037	98
6172038	82
6172039	91
6172040	91
6172042	81
6172043	86
6172044	89
6172045	98
Blank	84
LCS	99
MS	91
MSD	91

Limits:	36-156

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13013 1226677 6172036-45

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						Other Instructions and Notes																										
NOTES:																																
*Primary Analyses as indicated on sample labels																																
**Secondary Analyses as indicated on sample labels																																
@ For hex chrome analysis, lab will measure pH and ORP																																
Samplers: (Signature)																																
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod	*Metals EPA 8210/8020/8274/1A	*Hex Chrome EPA 7199*	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1631B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1635C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B				
DUP01-SIV-QC-122010	12.20.10	0832	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												SEDIMENT DUP	
DUP09-SASB-QC-122010	12.20.10	1011	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												SURFACE DUP	
DUP14-SASB-QC-122010	12.20.10	1439	soil	none	4 16 oz. jars			X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X		SUBSURFACE DUP	
DUP14-SASB-QC-122010	12.20.10	1439	soil	none	5 Encore Samplers	X	X	X																							SUBSURFACE DUP	
EB06-SASB-122010	12.20.10	1235	water	none	6-1 liter ambers			X						X	X			X	X												surface tool rinse	
EB06-SASB-122010	12.20.10	1235	water	none	1-500 ml poly							X	X			X															surface tool rinse	
EB06-SASB-122010	12.20.10	1235	water	HNO3	1-500 ml poly						X																				surface tool rinse	
SED-003-SIV-SD-0.0-0.5	12.20.10	0946	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SED-005-SIV-SD-0.0-0.5MS	12.20.10	0830	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X												SEDIMENT MS/MSD	
SED-007-SIV-SD-0.0-0.6	12.20.11	1330	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SED-008-SIV-SD-0.0-0.5	12.20.10	1039	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SED-034-SIV-SD-0.0-0.5	12.20.10	1530	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SED-037-SIV-SD-0.0-0.5	12.20.10	1430	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-044-SASB-SB-4.0-5.0MS	12.20.10	1138	soil	none	12 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X		SUBSURFACE MS/MSD	
SL-044-SASB-SB-4.5MS	12.20.10	1130	soil	none	15 Encore Samplers	X	X	X	X																							SUBSURFACE MS/MSD
SL-044-SASB-SB-7.0-8.0	12.20.10	1150	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X			
SL-044-SASB-SB-7.5	12.20.10	1147	soil	none	5 Encore Samplers	X	X	X	X																							
SL-045-SASB-SB-3.0-4.0	12.20.10	1424	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X			
SL-045-SASB-SB-3.5	12.20.10	1420	soil	none	5 Encore Samplers	X	X	X	X																							
SL-212-SASB-SS-0.0-0.5	12.20.10	0922	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-213-SASB-SS-0.0-0.5	12.20.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-214-SASB-SS-0.0-0.5	12.20.10	0943	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-215-SASB-SS-0.0-0.5MS	12.20.10	1005	soil	none	2 x 16 oz. jar & 2 6" sleeves			X			X	X	X	X	X	X		X	X													SURFACE MS/MSD
SL-216-SASB-SS-0.0-0.5	12.20.10	0931	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-217-SASB-SS-0.0-0.5	12.20.10	0950	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-218-SASB-SS-0.0-0.5	12.20.10	1030	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-220-SASB-SS-0.0-0.5	12.20.10	1028	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-221-SASB-SS-0.0-0.5	12.20.10	1100	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-255-SASB-SS-0.0-0.5	12.20.10	1010	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
TB-122010	12.20.10	1230	water	HCl	4-40 mL clear VOA vials	X	X	X	X																							trip blank
Relinquished by: (Signature)						Received for Laboratory by: (Signature)						Date/Time						Laboratory:														
Received by: (Signature)						Date/Time						12/22/10 1:05						Lancaster Laboratories, Inc.														
Airbill No.						00732992												No. of coolers = 4														

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

March 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/22/2010

Group Number: 1226678

SDG: DX029

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample DescriptionDUP01-SIV-QC-122010 Soil
SED-003-SIV-SD-0.0-0.5 Sediment
SED-005-SIV-SD-0.0-0.5 Sediment
SED-005-SIV-SD-0.0-0.5MS Sediment
SED-005-SIV-SD-0.0-0.5MSD Sediment
SED-007-SIV-SD-0.0-0.6 Sediment
SED-008-SIV-SD-0.0-0.5 Sediment
SED-034-SIV-SD-0.0-0.5 Sediment
SED-037-SIV-SD-0.0-0.5 SedimentLancaster Labs (LLI) #6172046
6172047
6172048
6172049
6172050
6172051
6172052
6172053
6172054

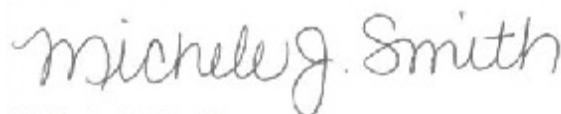
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172046
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DDP01 SDG#: DX029-15FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	20.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172046
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DDP01 SDG#: DX029-15FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0424 JQ	0.0395	1.26	1
11031	12378-PeCDD	40321-76-4	0.256 JB	0.0514	6.31	1
11031	123478-HxCDD	39227-28-6	0.178 JBQ	0.0576	6.31	1
11031	123678-HxCDD	57653-85-7	0.893 JBQ	0.0590	6.31	1
11031	123789-HxCDD	19408-74-3	0.927 JB	0.0582	6.31	1
11031	1234678-HpCDD	35822-46-9	8.87 B	0.0535	6.31	1
11031	OCDD	3268-87-9	70.8 B	0.0398	12.6	1
11031	2378-TCDF	51207-31-9	4.94	0.119	1.26	1
11650	2378-TCDF-Conf	51207-31-9	4.47 B	0.0501	1.26	1
11031	12378-PeCDF	57117-41-6	1.94 JB	0.0419	6.31	1
11031	23478-PeCDF	57117-31-4	0.819 JB	0.0422	6.31	1
11031	123478-HxCDF	70648-26-9	0.430 JB	0.0477	6.31	1
11031	123678-HxCDF	57117-44-9	0.379 JB	0.0423	6.31	1
11031	123789-HxCDF	72918-21-9	0.430 JB	0.0514	6.31	1
11031	234678-HxCDF	60851-34-5	0.516 JB	0.0456	6.31	1
11031	1234678-HpCDF	67562-39-4	2.18 JB	0.0236	6.31	1
11031	1234789-HpCDF	55673-89-7	0.230 JB	0.0337	6.31	1
11031	OCDF	39001-02-0	3.65 JB	0.0494	12.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-2378-TCDF-Conf	77	24 - 169
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	79	17 - 157
13C12-1278-TCDD (CRS)	89	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172046
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DDP01 SDG#: DX029-15FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172046
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DDP01 SDG#: DX029-15FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 14:44	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11012001	02/06/2011 16:13	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-003-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172047
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD03 SDG#: DX029-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	26.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172047
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD03 SDG#: DX029-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.108 JQ	0.0541	1.35	1
11031	12378-PeCDD	40321-76-4	0.245 JB	0.0816	6.77	1
11031	123478-HxCDD	39227-28-6	0.364 JB	0.0760	6.77	1
11031	123678-HxCDD	57653-85-7	1.06 JB	0.0809	6.77	1
11031	123789-HxCDD	19408-74-3	0.712 JB	0.0752	6.77	1
11031	1234678-HpCDD	35822-46-9	22.1 B	0.0862	6.77	1
11031	OCDD	3268-87-9	223 B	0.0706	13.5	1
11031	2378-TCDF	51207-31-9	0.719 JQ	0.124	1.35	1
11031	12378-PeCDF	57117-41-6	1.98 JB	0.0510	6.77	1
11031	23478-PeCDF	57117-31-4	0.831 JBQ	0.0490	6.77	1
11031	123478-HxCDF	70648-26-9	0.615 JB	0.0536	6.77	1
11031	123678-HxCDF	57117-44-9	0.430 JB	0.0486	6.77	1
11031	123789-HxCDF	72918-21-9	0.294 JB	0.0609	6.77	1
11031	234678-HxCDF	60851-34-5	0.489 JB	0.0522	6.77	1
11031	1234678-HpCDF	67562-39-4	4.73 JB	0.0299	6.77	1
11031	1234789-HpCDF	55673-89-7	0.478 JBQ	0.0502	6.77	1
11031	OCDF	39001-02-0	8.23 JB	0.0748	13.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	88	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-003-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172047
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD03 SDG#: DX029-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-003-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172047
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD03 SDG#: DX029-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 18:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-005-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172048
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172048
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0511 U	0.0511	1.24	1
11031	12378-PeCDD	40321-76-4	0.283 JBQ	0.0578	6.18	1
11031	123478-HxCDD	39227-28-6	0.230 JB	0.0614	6.18	1
11031	123678-HxCDD	57653-85-7	0.918 JB	0.0655	6.18	1
11031	123789-HxCDD	19408-74-3	0.990 JB	0.0604	6.18	1
11031	1234678-HpCDD	35822-46-9	8.71 B	0.0585	6.18	1
11031	OCDD	3268-87-9	62.3 B	0.0467	12.4	1
11031	2378-TCDF	51207-31-9	4.44	0.138	1.24	1
11650	2378-TCDF-Conf	51207-31-9	4.24 B	0.0488	1.24	1
11031	12378-PeCDF	57117-41-6	2.12 JB	0.0476	6.18	1
11031	23478-PeCDF	57117-31-4	0.809 JB	0.0475	6.18	1
11031	123478-HxCDF	70648-26-9	0.388 JBQ	0.0514	6.18	1
11031	123678-HxCDF	57117-44-9	0.404 JBQ	0.0440	6.18	1
11031	123789-HxCDF	72918-21-9	0.473 JB	0.0564	6.18	1
11031	234678-HxCDF	60851-34-5	0.438 JB	0.0491	6.18	1
11031	1234678-HpCDF	67562-39-4	2.11 JB	0.0267	6.18	1
11031	1234789-HpCDF	55673-89-7	0.261 JBQ	0.0391	6.18	1
11031	OCDF	39001-02-0	3.16 JB	0.0512	12.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-2378-TCDF-Conf	73	24 - 169
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	76	17 - 157
13C12-1278-TCDD (CRS)	88	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column

Sample Description: SED-005-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172048
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-005-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172048
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 19:40	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11012001	02/06/2011 20:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-005-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172049
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172049
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	26.1	0.107	1.24	1
11031	12378-PeCDD	40321-76-4	132 B	0.115	6.18	1
11031	123478-HxCDD	39227-28-6	131 B	0.110	6.18	1
11031	123678-HxCDD	57653-85-7	127 B	0.114	6.18	1
11031	123789-HxCDD	19408-74-3	129 B	0.110	6.18	1
11031	1234678-HpCDD	35822-46-9	138 B	0.133	6.18	1
11031	OCDD	3268-87-9	335 B	0.108	12.4	1
11031	2378-TCDF	51207-31-9	32.9	0.218	1.24	1
11031	12378-PeCDF	57117-41-6	130 B	0.0880	6.18	1
11031	23478-PeCDF	57117-31-4	130 B	0.0837	6.18	1
11031	123478-HxCDF	70648-26-9	127 B	0.120	6.18	1
11031	123678-HxCDF	57117-44-9	128 B	0.110	6.18	1
11031	123789-HxCDF	72918-21-9	127 B	0.137	6.18	1
11031	234678-HxCDF	60851-34-5	127 B	0.114	6.18	1
11031	1234678-HpCDF	67562-39-4	128 B	0.102	6.18	1
11031	1234789-HpCDF	55673-89-7	127 B	0.143	6.18	1
11031	OCDF	39001-02-0	263 B	0.133	12.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-005-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172049
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-005-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172049
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 20:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172050
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172050
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	25.9	0.0591	1.24	1
11031	12378-PeCDD	40321-76-4	129 B	0.0710	6.18	1
11031	123478-HxCDD	39227-28-6	125 B	0.0635	6.18	1
11031	123678-HxCDD	57653-85-7	127 B	0.0625	6.18	1
11031	123789-HxCDD	19408-74-3	123 B	0.0618	6.18	1
11031	1234678-HpCDD	35822-46-9	132 B	0.0710	6.18	1
11031	OCDD	3268-87-9	310 B	0.0527	12.4	1
11031	2378-TCDF	51207-31-9	31.0	0.127	1.24	1
11031	12378-PeCDF	57117-41-6	128 B	0.0528	6.18	1
11031	23478-PeCDF	57117-31-4	127 B	0.0517	6.18	1
11031	123478-HxCDF	70648-26-9	123 B	0.0889	6.18	1
11031	123678-HxCDF	57117-44-9	124 B	0.0831	6.18	1
11031	123789-HxCDF	72918-21-9	121 B	0.0901	6.18	1
11031	234678-HxCDF	60851-34-5	124 B	0.0867	6.18	1
11031	1234678-HpCDF	67562-39-4	124 B	0.0462	6.18	1
11031	1234789-HpCDF	55673-89-7	123 B	0.0613	6.18	1
11031	OCDF	39001-02-0	257 B	0.0580	12.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	85	25 - 164
13C12-12378-PeCDD	96	25 - 181
13C12-123478-HxCDD	92	32 - 141
13C12-123678-HxCDD	93	28 - 130
13C12-123789-HxCDD	94	28 - 130
13C12-1234678-HpCDD	102	23 - 140
13C12-OCDD	102	17 - 157
13C12-2378-TCDF	86	24 - 169
13C12-12378-PeCDF	98	24 - 185
13C12-23478-PeCDF	96	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	99	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	97	26 - 138
13C12-OCDF	93	17 - 157
13C12-1278-TCDD (CRS)	97	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172050
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172050
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD05 SDG#: DX029-17MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 21:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-007-SIV-SD-0.0-0.6 Sediment
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172051
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD07 SDG#: DX029-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	17.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Sediment
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172051
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD07 SDG#: DX029-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.130 JQ	0.0521	1.22	1
11031	12378-PeCDD	40321-76-4	0.580 JBQ	0.0908	6.08	1
11031	123478-HxCDD	39227-28-6	0.782 JB	0.109	6.08	1
11031	123678-HxCDD	57653-85-7	2.45 JB	0.0945	6.08	1
11031	123789-HxCDD	19408-74-3	1.39 JB	0.0738	6.08	1
11031	1234678-HpCDD	35822-46-9	46.2 B	0.0968	6.08	1
11031	OCDD	3268-87-9	337 B	0.0752	12.2	1
11031	2378-TCDF	51207-31-9	0.307 J	0.166	1.22	1
11031	12378-PeCDF	57117-41-6	0.751 JB	0.0717	6.08	1
11031	23478-PeCDF	57117-31-4	2.16 JB	0.0807	6.08	1
11031	123478-HxCDF	70648-26-9	3.30 JB	0.142	6.08	1
11031	123678-HxCDF	57117-44-9	1.80 JB	0.106	6.08	1
11031	123789-HxCDF	72918-21-9	0.690 JB	0.0710	6.08	1
11031	234678-HxCDF	60851-34-5	1.90 JB	0.0607	6.08	1
11031	1234678-HpCDF	67562-39-4	8.14 B	0.0928	6.08	1
11031	1234789-HpCDF	55673-89-7	1.00 JB	0.0529	6.08	1
11031	OCDF	39001-02-0	9.62 JB	0.0602	12.2	1

The sample was reported from an extraction of the sample that was outside of the client requested holding time.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	52	32 - 141
13C12-123678-HxCDD	58	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	30	26 - 152
13C12-123678-HxCDF	40	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	35	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	62	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

Sample Description: SED-007-SIV-SD-0.0-0.6 Sediment
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172051
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD07 SDG#: DX029-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-007-SIV-SD-0.0-0.6 Sediment
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172051
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD07 SDG#: DX029-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11032001	02/07/2011 22:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	2	11032001	02/01/2011 12:30	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-008-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172052
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD08 SDG#: DX029-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	32.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-008-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172052
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD08 SDG#: DX029-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0774 U	0.0774	1.49	1
11031	12378-PeCDD	40321-76-4	0.107 U	0.107	7.43	1
11031	123478-HxCDD	39227-28-6	0.444 JBQ	0.102	7.43	1
11031	123678-HxCDD	57653-85-7	1.37 JB	0.103	7.43	1
11031	123789-HxCDD	19408-74-3	1.28 JB	0.100	7.43	1
11031	1234678-HpCDD	35822-46-9	18.9 B	0.0976	7.43	1
11031	OCDD	3268-87-9	180 B	0.0938	14.9	1
11031	2378-TCDF	51207-31-9	1.10 J	0.158	1.49	1
11031	12378-PeCDF	57117-41-6	3.10 JB	0.0749	7.43	1
11031	23478-PeCDF	57117-31-4	1.17 JB	0.0719	7.43	1
11031	123478-HxCDF	70648-26-9	0.673 JB	0.0743	7.43	1
11031	123678-HxCDF	57117-44-9	0.695 JB	0.0701	7.43	1
11031	123789-HxCDF	72918-21-9	0.331 JBQ	0.0874	7.43	1
11031	234678-HxCDF	60851-34-5	0.653 JB	0.0738	7.43	1
11031	1234678-HpCDF	67562-39-4	3.91 JB	0.0730	7.43	1
11031	1234789-HpCDF	55673-89-7	0.517 JBQ	0.0941	7.43	1
11031	OCDF	39001-02-0	7.73 JB	0.119	14.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	89	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-008-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172052
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD08 SDG#: DX029-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-008-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172052
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/22/2010 10:55

Suite 210

Reported: 03/01/2011 16:27

Chantilly VA 20151

DSD08 SDG#: DX029-19

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 23:27	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-034-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172053
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD34 SDG#: DX029-20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	22.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172053
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD34 SDG#: DX029-20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0506 U	0.0506	1.29	1
11031	12378-PeCDD	40321-76-4	0.0979 JB	0.0481	6.43	1
11031	123478-HxCDD	39227-28-6	0.139 JBQ	0.0623	6.43	1
11031	123678-HxCDD	57653-85-7	0.303 JBQ	0.0674	6.43	1
11031	123789-HxCDD	19408-74-3	0.266 JB	0.0620	6.43	1
11031	1234678-HpCDD	35822-46-9	3.56 JB	0.0862	6.43	1
11031	OCDD	3268-87-9	21.4 B	0.0742	12.9	1
11031	2378-TCDF	51207-31-9	0.194 JQ	0.0753	1.29	1
11031	12378-PeCDF	57117-41-6	0.190 JB	0.0389	6.43	1
11031	23478-PeCDF	57117-31-4	0.572 JB	0.0386	6.43	1
11031	123478-HxCDF	70648-26-9	0.258 JBQ	0.0509	6.43	1
11031	123678-HxCDF	57117-44-9	0.215 JB	0.0469	6.43	1
11031	123789-HxCDF	72918-21-9	0.133 JBQ	0.0553	6.43	1
11031	234678-HxCDF	60851-34-5	0.369 JB	0.0490	6.43	1
11031	1234678-HpCDF	67562-39-4	1.40 JB	0.0540	6.43	1
11031	1234789-HpCDF	55673-89-7	0.183 JBQ	0.0725	6.43	1
11031	OCDF	39001-02-0	2.13 JB	0.0815	12.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	76	17 - 157
13C12-1278-TCDD (CRS)	88	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-034-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172053
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD34 SDG#: DX029-20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-034-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172053
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD34 SDG#: DX029-20

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/29/2011 00:24	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-037-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172054
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD37 SDG#: DX029-21*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	28.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-037-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172054
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD37 SDG#: DX029-21*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.139 JQ	0.0807	1.40	1
11031	12378-PeCDD	40321-76-4	0.903 JBQ	0.121	6.98	1
11031	123478-HxCDD	39227-28-6	0.876 JB	0.0732	6.98	1
11031	123678-HxCDD	57653-85-7	3.80 JB	0.0788	6.98	1
11031	123789-HxCDD	19408-74-3	2.40 JB	0.0728	6.98	1
11031	1234678-HpCDD	35822-46-9	95.9 B	0.104	6.98	1
11031	OCDD	3268-87-9	692 B	0.111	14.0	1
11031	2378-TCDF	51207-31-9	1.19 J	0.152	1.40	1
11031	12378-PeCDF	57117-41-6	1.57 JB	0.0606	6.98	1
11031	23478-PeCDF	57117-31-4	1.16 JB	0.0578	6.98	1
11031	123478-HxCDF	70648-26-9	0.857 JB	0.0630	6.98	1
11031	123678-HxCDF	57117-44-9	0.664 JB	0.0589	6.98	1
11031	123789-HxCDF	72918-21-9	0.353 JBQ	0.0656	6.98	1
11031	234678-HxCDF	60851-34-5	0.819 JB	0.0603	6.98	1
11031	1234678-HpCDF	67562-39-4	4.92 JB	0.0450	6.98	1
11031	1234789-HpCDF	55673-89-7	0.454 JB	0.0570	6.98	1
11031	OCDF	39001-02-0	8.47 JB	0.0793	14.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-037-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172054
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD37 SDG#: DX029-21*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-037-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172054
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 03/01/2011 16:27

DSD37 SDG#: DX029-21*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/29/2011 01:20	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/01/11 at 04:27 PM

Group Number: 1226678

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11006162401A 28a Moisture Content by 160.3	Sample number(s): 6172046-6172054				100		80-120		

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11012001	Sample number(s): 6172046-6172050, 6172052-6172054								
2378-TCDD	0.0393 U	0.0393	1.00	ng/kg	102		67-158		
12378-PeCDD	0.199 J	0.0435	5.00	ng/kg	101		70-142		
123478-HxCDD	0.147 J	0.0378	5.00	ng/kg	99		70-164		
123678-HxCDD	0.162 J	0.0378	5.00	ng/kg	101		76-134		
123789-HxCDD	0.167 J	0.0372	5.00	ng/kg	98		64-162		
1234678-HpCDD	0.437 J	0.0525	5.00	ng/kg	100		70-140		
OCDD	1.37 J	0.0491	10.0	ng/kg	100		78-144		
2378-TCDF	0.0396 U	0.0396	1.00	ng/kg	106		75-158		
2378-TCDF-Conf	0.0679 J	0.0199	1.00	ng/kg					
12378-PeCDF	0.199 J	0.0246	5.00	ng/kg	99		80-134		
23478-PeCDF	0.230 J	0.0245	5.00	ng/kg	101		68-160		
123478-HxCDF	0.209 J	0.0352	5.00	ng/kg	99		72-134		
123678-HxCDF	0.226 J	0.0317	5.00	ng/kg	98		84-130		
123789-HxCDF	0.206 J	0.0395	5.00	ng/kg	98		78-130		
234678-HxCDF	0.207 J	0.0339	5.00	ng/kg	98		70-156		
1234678-HpCDF	1.49 J	0.0429	5.00	ng/kg	97		82-122		
1234789-HpCDF	0.200 J	0.0602	5.00	ng/kg	98		78-138		
OCDF	0.495 J	0.0525	10.0	ng/kg	99		63-170		

Batch number: 11032001	Sample number(s): 6172051								
2378-TCDD	0.0323 U	0.0323	1.00	ng/kg	97		67-158		
12378-PeCDD	0.0510 J	0.0302	5.00	ng/kg	103		70-142		
123478-HxCDD	0.0361 J	0.0209	5.00	ng/kg	103		70-164		
123678-HxCDD	0.0384 J	0.0219	5.00	ng/kg	102		76-134		
123789-HxCDD	0.0359 J	0.0204	5.00	ng/kg	100		64-162		
1234678-HpCDD	0.219 J	0.0316	5.00	ng/kg	103		70-140		
OCDD	0.513 J	0.0319	10.0	ng/kg	103		78-144		
2378-TCDF	0.0349 U	0.0349	1.00	ng/kg	111		75-158		
12378-PeCDF	0.0415 J	0.0151	5.00	ng/kg	101		80-134		
23478-PeCDF	0.106 J	0.0150	5.00	ng/kg	102		68-160		
123478-HxCDF	0.0659 J	0.0165	5.00	ng/kg	101		72-134		
123678-HxCDF	0.0508 J	0.0145	5.00	ng/kg	99		84-130		
123789-HxCDF	0.0588 J	0.0187	5.00	ng/kg	104		78-130		
234678-HxCDF	0.0823 J	0.0153	5.00	ng/kg	100		70-156		
1234678-HpCDF	0.242 J	0.0145	5.00	ng/kg	103		82-122		
1234789-HpCDF	0.0453 J	0.0190	5.00	ng/kg	102		78-138		
OCDF	0.298 J	0.0355	10.0	ng/kg	98		63-170		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/01/11 at 04:27 PM

Group Number: 1226678

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11006162401A 28a Moisture Content by 160.3	Sample number(s): 6172046-6172054				BKG: P172038 19.1		20.3	6	20
Batch number: 11012001	Sample number(s): 6172046-6172050, 6172052-6172054				UNSPK: 6172048				
2378-TCDD	106	105	67-158	1	25				
12378-PeCDD	106	104	70-142	2	25				
123478-HxCDD	106	101	70-164	5	25				
123678-HxCDD	102	102	76-134	0	25				
123789-HxCDD	103	99	64-162	5	25				
1234678-HpCDD	104	100	70-140	4	25				
OCDD	110	100	78-144	8	25				
2378-TCDF	115	108	75-158	6	25				
12378-PeCDF	103	102	80-134	2	25				
23478-PeCDF	105	102	68-160	3	25				
123478-HxCDF	103	99	72-134	4	25				
123678-HxCDF	103	100	84-130	3	25				
123789-HxCDF	102	98	78-130	5	25				
234678-HxCDF	102	100	70-156	2	25				
1234678-HpCDF	102	99	82-122	3	25				
1234789-HpCDF	102	99	78-138	3	25				
OCDF	105	103	63-170	2	25				
Batch number: 11032001	Sample number(s): 6172051				UNSPK: P189234				
2378-TCDD	92	95	67-158	4	25				
12378-PeCDD	100	98	70-142	1	25				
123478-HxCDD	97	96	70-164	1	25				
123678-HxCDD	94	101	76-134	7	25				
123789-HxCDD	95	100	64-162	6	25				
1234678-HpCDD	99	83	70-140	15	25				
OCDD	146*	26*	78-144	66*	25				
2378-TCDF	105	112	75-158	7	25				
12378-PeCDF	102	98	80-134	4	25				
23478-PeCDF	98	98	68-160	1	25				
123478-HxCDF	100	95	72-134	5	25				
123678-HxCDF	105	106	84-130	1	25				
123789-HxCDF	96	93	78-130	3	25				
234678-HxCDF	89	101	70-156	13	25				
1234678-HpCDF	93	96	82-122	3	25				
1234789-HpCDF	94	96	78-138	2	25				
OCDF	97	98	63-170	1	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/01/11 at 04:27 PM

Group Number: 1226678

Surrogate Quality Control

Batch number: 11012001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6172046	76	82	75	82	77	83
6172047	74	85	75	79	76	79
6172048	72	80	72	80	74	76
6172049	66	76	70	74	70	70
6172050	85	96	85	90	87	99
6172052	73	82	73	75	73	72
6172053	75	83	73	76	73	78
6172054	74	84	72	73	72	77
Blank	76	80	76	82	78	83
MS	66	76	70	74	70	70
MSD	85	96	85	90	87	99
OPR	73	72	73	77	74	80

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

6172046	95	81	79	89	83	83
6172047	81	60	60	88	84	80
6172048	88	78	76	88	83	80
6172049	84	75	73	82	77	75
6172050	101	97	93	97	96	92
6172052	80	78	74	89	83	79
6172053	86	80	76	88	85	80
6172054	78	79	75	87	84	76
Blank	96	86	83	95	83	85
MS	84	75	73	82	77	75
MSD	101	97	93	97	96	92
OPR	90	79	75	89	77	81

Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF

6172046	82	84	90	91	77	86
6172047	79	79	82	82	79	85
6172048	78	80	86	87	74	86
6172049	76	75	81	82	68	78
6172050	93	94	102	102	86	98
6172052	78	79	81	80	76	81
6172053	79	80	86	85	76	84
6172054	76	76	82	81	77	83
Blank	86	86	96	95	75	83
MS	76	75	81	82	68	78
MSD	93	94	102	102	86	98
OPR	81	81	89	86	71	75

Limits:	28-130	28-130	23-140	17-157	24-169	24-185
	13C12-2378-TCDF-Conf					

6172046 77
6172047

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/01/11 at 04:27 PM

Group Number: 1226678

Surrogate Quality Control

6172048 73
6172049
6172050
6172052
6172053
6172054
Blank 78
MS
MSD
OPR

Limits: 24-169

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11032001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6172051	77	61	30	40	72	73
Blank	76	80	75	83	79	82
MS	97	80	69	82	63	77
MSD	78	60	54	78	71	59
OPR	65	55	69	66	72	80

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

6172051	35	79	62	80	73	52
Blank	84	86	85	96	80	86
MS	64	52	50	83	118	63
MSD	70	64	85	85	63	64
OPR	86	84	84	78	68	73

Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF

6172051	58	75	78	75	73	73
Blank	83	88	95	86	63	83
MS	64	75	67	130	72	76
MSD	65	75	67	97	73	67
OPR	78	80	93	91	58	59

Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

13013

1226678

6172046-54

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						Other Instructions and Notes																									
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP																															
Samplers: (Signature)																															
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCS/EPA 8260B	1,4-Dioxane EPA 8260B	SVOC EPA 8270C & PAHS 8270 SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/6010B/7471A	*Hex Chrome EPA 7199*	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1631B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 8850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1631C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 5045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B			
DUP01-SIV-QC-122010	12.20.10	0832	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												SEDIMENT DUP
DUP09-SASB-QC-122010	12.20.10	1011	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												SURFACE DUP
DUP14-SASB-QC-122010	12.20.10	1439	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X		SUBSURFACE DUP
DUP14-SASB-QC-122010	12.20.10	1439	soil	none	5 Encore Samplers	X	X		X																						SUBSURFACE DUP
EB06-SASB-122010	12.20.10	1235	water	none	6-1 liter ambers			X						X	X			X	X												surface tool rinsate
EB06-SASB-122010	12.20.10	1235	water	none	1-500 ml poly							X	X			X															surface tool rinsate
EB06-SASB-122010	12.20.10	1235	water	HNO3	1-500 ml poly						X																				surface tool rinsate
SED-003-SIV-SD-0.0-0.5	12.20.10	0946	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SED-005-SIV-SD-0.0-0.5MS	12.20.10	0830	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X												SEDIMENT MS/MSD
SED-007-SIV-SD-0.0-0.6	12.20.11	1330	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SED-008-SIV-SD-0.0-0.5	12.20.10	1039	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SED-034-SIV-SD-0.0-0.5	12.20.10	1530	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SED-037-SIV-SD-0.0-0.5	12.20.10	1430	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-044-SASB-SB-4.0-5.0MS	12.20.10	1138	soil	none	12 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	SUBSURFACE MS/MSD
SL-044-SASB-SB-4.5MS	12.20.10	1130	soil	none	15 Encore Samplers	X	X		X																						SUBSURFACE MS/MSD
SL-044-SASB-SB-7.0-8.0	12.20.10	1150	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	
SL-044-SASB-SB-7.5	12.20.10	1147	soil	none	5 Encore Samplers	X	X		X																						
SL-045-SASB-SB-3.0-4.0	12.20.10	1424	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	
SL-045-SASB-SB-3.5	12.20.10	1420	soil	none	5 Encore Samplers	X	X		X																						
SL-212-SASB-SS-0.0-0.5	12.20.10	0922	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-213-SASB-SS-0.0-0.5	12.20.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-214-SASB-SS-0.0-0.5	12.20.10	0943	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-215-SASB-SS-0.0-0.5MS	12.20.10	1005	soil	none	2 x 16 oz. jar s& 2 6" sleeves			X			X	X	X	X	X	X		X	X												SURFACE MS/MSD
SL-216-SASB-SS-0.0-0.5	12.20.10	0931	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-217-SASB-SS-0.0-0.5	12.20.10	0950	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-218-SASB-SS-0.0-0.5	12.20.10	1020	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X				V	O	I	D					
SL-220-SASB-SS-0.0-0.5	12.20.10	1028	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X				V	O	I	D					
SL-221-SASB-SS-0.0-0.5	12.20.10	1100	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X				V	O	I	D					
SL-255-SASB-SS-0.0-0.5	12.20.10	1010	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
TB-122010	12.20.10	1230	water	HCl	4-40 mL clear VOA vials	X	X		X																						trip blank
Relinquished by: (Signature)						Date/Time						Received for Laboratory by: (Signature)						Date/Time						Laboratory:							
						12.20.10 1630												12/22/10 1055						Lancaster Laboratories, Inc.							
Received by: (Signature)						Date/Time						Abbott No.												No. of coolers = 4							
												00732992																			

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 04, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/22/2010

Group Number: 1226717

SDG: DE050

PO Number: 1203-004-007-AL

Release Number: Tracking #11667

State of Sample Origin: CA

Client Sample DescriptionDUP02-SIV-QC-122110 Soil
SED-002-SIV-SD-0.0-0.5 Sediment
SED-002-SIV-SD-0.0-0.5MS Sediment
SED-002-SIV-SD-0.0-0.5MSD Sediment
SED-002-SIV-SD-0.0-0.5DUP Sediment
SED-015-SIV-SD-0.0-0.5 Sediment
SED-036-SIV-SD-0.0-0.5 Sediment
SED-038-SIV-SD-0.0-0.5 Sediment
SED-039-SIV-SD-0.0-0.5 SedimentLancaster Labs (LLI) #6172315
6172316
6172317
6172318
6172319
6172320
6172321
6172322
6172323

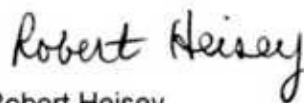
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey
Senior Specialist

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SDP02 SDG#: DE050-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	590	1
04688	Benzidine	92-87-5	1,400	U 1,400	4,000	1
04688	Benzoic acid	65-85-0	200	U 200	590	1
04688	Benzyl alcohol	100-51-6	200	U 200	590	1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200	1
04688	Carbazole	86-74-8	20	U 20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	40	U 40	200	1
04688	4-Chloroaniline	106-47-8	79	U 79	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200	1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200	1
04688	2-Chlorophenol	95-57-8	20	U 20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U 40	200	1
04688	Dibenzofuran	132-64-9	20	U 20	200	1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200	1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200	1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	400	1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200	1
04688	2,4-Dimethylphenol	105-67-9	40	U 40	200	1
04688	3,5-Dimethylphenol	108-68-9	40	U 40	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	590	1
04688	2,4-Dinitrophenol	51-28-5	790	U 790	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	40	U 40	200	1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	87	J 20	400	1
04688	Hexachlorobenzene	118-74-1	20	U 20	200	1
04688	Hexachlorobutadiene	87-68-3	79	U 79	200	1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	590	1
04688	Hexachloroethane	67-72-1	20	U 20	200	1
04688	Isophorone	78-59-1	20	U 20	200	1
04688	2-Methylphenol	95-48-7	40	U 40	200	1
04688	4-Methylphenol	106-44-5	40	U 40	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	20	U 20	200	1
04688	3-Nitroaniline	99-09-2	40	U 40	200	1
04688	4-Nitroaniline	100-01-6	79	U 79	200	1
04688	Nitrobenzene	98-95-3	20	U 20	200	1
04688	2-Nitrophenol	88-75-5	20	U 20	200	1
04688	4-Nitrophenol	100-02-7	200	U 200	590	1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	200	U 200	590	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SDP02 SDG#: DE050-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	20 U	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	20 U	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	40 U	40	200	1
04688	2,4,6-Trichlorophenol	88-06-2	40 U	40	200	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.79 U	0.79	2.0	1
10138	Acenaphthylene	208-96-8	0.47 J	0.40	2.0	1
10138	Anthracene	120-12-7	0.40 U	0.40	2.0	1
10138	Benzo(a)anthracene	56-55-3	0.79 U	0.79	2.0	1
10138	Benzo(a)pyrene	50-32-8	0.79 U	0.79	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	1.5 J	0.79	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	0.79 U	0.79	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	0.79 U	0.79	2.0	1
10138	Butylbenzylphthalate	85-68-7	7.1 U	7.1	21	1
10138	Di-n-butylphthalate	84-74-2	7.1 U	7.1	21	1
10138	Chrysene	218-01-9	1.1 J	0.40	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	0.79 U	0.79	2.0	1
10138	Diethylphthalate	84-66-2	7.1 U	7.1	21	1
10138	Dimethylphthalate	131-11-3	7.1 U	7.1	21	1
10138	Fluoranthene	206-44-0	1.6 J	0.79	2.0	1
10138	Fluorene	86-73-7	0.79 U	0.79	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.79 U	0.79	2.0	1
10138	1-Methylnaphthalene	90-12-0	0.79 U	0.79	2.0	1
10138	2-Methylnaphthalene	91-57-6	0.79 U	0.79	2.0	1
10138	Naphthalene	91-20-3	2.4	0.79	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	0.79 U	0.79	2.0	1
10138	Di-n-octylphthalate	117-84-0	7.1 U	7.1	21	1
10138	Phenanthrene	85-01-8	1.1 J	0.79	2.0	1
10138	Pyrene	129-00-0	1.1 J	0.79	2.0	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.4 U	1.4	4.3	1
10401	Dalapon	75-99-0	5.2 U	5.2	11	1
10401	2,4-DB	94-82-6	4.4 U	4.4	4.4	1
10401	Dicamba	1918-00-9	1.2 J	0.48	1.4	1
10401	Dinoseb	88-85-7	0.95 U	0.95	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.96 J	0.95	2.0	1
10401	MCPA	94-74-6	90 U	90	300	1
10401	MCPP (Mecoprop)	93-65-2	89 U	89	300	1
10401	2,4,5-T	93-76-5	0.098 U	0.098	0.20	1
10401	2,4,5-TP	93-72-1	0.18 J	0.089	0.20	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SDP02 SDG#: DE050-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.078 U	0.078	0.20	1
01363	Alpha BHC	319-84-6	0.040 U	0.040	0.20	1
01363	Beta BHC	319-85-7	0.071 U	0.071	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.040 U	0.040	0.20	1
01363	Chlordane	57-74-9	0.95 U	0.95	4.0	1
01363	p,p-DDD	72-54-8	0.078 U	0.078	0.40	1
01363	p,p-DDE	72-55-9	0.27 U	0.27	0.40	1
01363	p,p-DDT	50-29-3	0.49 U	0.49	0.49	1
01363	Delta BHC	319-86-8	0.043 U	0.043	0.20	1
01363	Dieldrin	60-57-1	0.078 U	0.078	0.40	1
01363	Endosulfan I	959-98-8	0.052 U	0.052	0.20	1
01363	Endosulfan II	33213-65-9	0.078 U	0.078	0.40	1
01363	Endosulfan Sulfate	1031-07-8	0.23 U	0.23	0.40	1
01363	Endrin	72-20-8	0.078 U	0.078	0.40	1
01363	Endrin Aldehyde	7421-93-4	0.078 U	0.078	0.40	1
01363	Endrin Ketone	53494-70-5	0.078 U	0.078	0.40	1
01363	Heptachlor	76-44-8	0.071 U	0.071	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.040 U	0.040	0.20	1
01363	Methoxychlor	72-43-5	0.40 U	0.40	2.0	1
01363	Mirex	2385-85-5	0.15 U	0.15	0.40	1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.8	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.9	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.9	1
10225	Aroclor 5460	11126-42-4	1.9 J	1.2	3.9	1
10225	PCB-1016	12674-11-2	0.39 U	0.39	2.0	1
10225	PCB-1221	11104-28-2	0.59 U	0.59	2.0	1
10225	PCB-1232	11141-16-5	0.62 U	0.62	2.0	1
10225	PCB-1242	53469-21-9	0.59 U	0.59	2.0	1
10225	PCB-1248	12672-29-6	0.39 U	0.39	2.0	1
10225	PCB-1254	11097-69-1	0.39 U	0.39	2.0	1
10225	PCB-1260	11096-82-5	0.68 J	0.39	2.0	1
10225	PCB-1262	37324-23-5	0.39 U	0.39	2.0	1
10225	PCB-1268	11100-14-4	0.39 U	0.39	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SDP02 SDG#: DE050-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,700	5.70	22.6	1
07914	Boron	7440-42-8	4.68 J	1.01	5.66	1
01650	Calcium	7440-70-2	2,800	6.94	22.6	1
01654	Iron	7439-89-6	20,400	5.33	22.6	1
01656	Lithium	7439-93-2	26.9	0.25	2.3	1
01657	Magnesium	7439-95-4	5,760	2.88	11.3	1
06958	Manganese	7439-96-5	300	0.0883	0.566	1
10145	Phosphorus	7723-14-0	487	0.634	11.3	1
01662	Potassium	7440-09-7	3,540	20.4	56.6	1
01667	Sodium	7440-23-5	70.3 J	42.2	113	1
07968	Strontium	7440-24-6	13.3	0.0702	0.566	1
06969	Tin	7440-31-5	2.02 J	1.13	11.3	1
06970	Titanium	7440-32-6	1,260	0.430	1.13	1
10146	Zirconium	7440-67-7	3.82 J	0.951	5.66	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0806 J	0.0686	0.229	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.94	0.0686	0.457	2
06126	Barium	7440-39-3	112	0.123	0.457	2
06127	Beryllium	7440-41-7	0.565	0.0183	0.114	2
06128	Cadmium	7440-43-9	0.239	0.0412	0.114	2
06131	Chromium	7440-47-3	22.0	0.137	0.457	2
06132	Cobalt	7440-48-4	6.50	0.0229	0.114	2
06133	Copper	7440-50-8	9.16	0.0755	0.457	2
06135	Lead	7439-92-1	10.3	0.0119	0.229	2
06138	Molybdenum	7439-98-7	0.545	0.0572	0.114	2
06139	Nickel	7440-02-0	13.1	0.114	0.457	2
06141	Selenium	7782-49-2	0.131 J	0.0457	0.457	2
06142	Silver	7440-22-4	0.0362 J	0.0137	0.114	2
06145	Thallium	7440-28-0	0.282	0.0343	0.114	2
06148	Vanadium	7440-62-2	45.8	0.0252	0.114	2
06149	Zinc	7440-66-6	82.1	0.640	3.43	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.110	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.95 U	0.95	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.7 U	10.7	35.7	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SDP02 SDG#: DE050-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
05892	3a Cr VI by EPA 7199	18540-29-9	mg/kg 0.31 J	mg/kg 0.24	mg/kg 1.2	1
ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	mV 522	mV 10.0	mV 10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	Std. Units 6.52	Std. Units 0.0100	Std. Units 0.0100	1
Wet Chemistry						
11624	28a Moisture Content by 160.3	n.a.	% 15.9	% 0.50	% 0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 05:02	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 13:19	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 15:35	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 10:20	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 18:41	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SDP02 SDG#: DE050-01FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 11:08	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 11:08	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 11:08	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:45	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 10:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 19:01	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 20:45	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	600	1
04688	Benzidine	92-87-5	1,400	U 1,400	4,000	1
04688	Benzoic acid	65-85-0	200	U 200	600	1
04688	Benzyl alcohol	100-51-6	200	U 200	600	1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200	1
04688	Carbazole	86-74-8	20	U 20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	40	U 40	200	1
04688	4-Chloroaniline	106-47-8	80	U 80	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200	1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200	1
04688	2-Chlorophenol	95-57-8	20	U 20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U 40	200	1
04688	Dibenzofuran	132-64-9	20	U 20	200	1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200	1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200	1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	400	1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200	1
04688	2,4-Dimethylphenol	105-67-9	40	U 40	200	1
04688	3,5-Dimethylphenol	108-68-9	40	U 40	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	600	1
04688	2,4-Dinitrophenol	51-28-5	800	U 800	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	40	U 40	200	1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	45	J 20	400	1
04688	Hexachlorobenzene	118-74-1	20	U 20	200	1
04688	Hexachlorobutadiene	87-68-3	80	U 80	200	1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	600	1
04688	Hexachloroethane	67-72-1	20	U 20	200	1
04688	Isophorone	78-59-1	20	U 20	200	1
04688	2-Methylphenol	95-48-7	40	U 40	200	1
04688	4-Methylphenol	106-44-5	40	U 40	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	20	U 20	200	1
04688	3-Nitroaniline	99-09-2	40	U 40	200	1
04688	4-Nitroaniline	100-01-6	80	U 80	200	1
04688	Nitrobenzene	98-95-3	20	U 20	200	1
04688	2-Nitrophenol	88-75-5	20	U 20	200	1
04688	4-Nitrophenol	100-02-7	200	U 200	600	1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	200	U 200	600	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	20 U	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	20 U	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	40 U	40	200	1
04688	2,4,6-Trichlorophenol	88-06-2	40 U	40	200	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.80 U	0.80	2.0	1
10138	Acenaphthylene	208-96-8	0.40 U	0.40	2.0	1
10138	Anthracene	120-12-7	0.40 U	0.40	2.0	1
10138	Benzo(a)anthracene	56-55-3	0.80 U	0.80	2.0	1
10138	Benzo(a)pyrene	50-32-8	0.80 U	0.80	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	1.3 J	0.80	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	0.80 U	0.80	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	0.80 U	0.80	2.0	1
10138	Butylbenzylphthalate	85-68-7	7.2 U	7.2	22	1
10138	Di-n-butylphthalate	84-74-2	7.2 U	7.2	22	1
10138	Chrysene	218-01-9	0.90 J	0.40	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	0.80 U	0.80	2.0	1
10138	Diethylphthalate	84-66-2	7.2 U	7.2	22	1
10138	Dimethylphthalate	131-11-3	7.2 U	7.2	22	1
10138	Fluoranthene	206-44-0	1.1 J	0.80	2.0	1
10138	Fluorene	86-73-7	0.80 U	0.80	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80 U	0.80	2.0	1
10138	1-Methylnaphthalene	90-12-0	0.80 U	0.80	2.0	1
10138	2-Methylnaphthalene	91-57-6	0.80 U	0.80	2.0	1
10138	Naphthalene	91-20-3	2.6 U	0.80	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	0.80 U	0.80	2.0	1
10138	Di-n-octylphthalate	117-84-0	7.2 U	7.2	22	1
10138	Phenanthrene	85-01-8	0.93 J	0.80	2.0	1
10138	Pyrene	129-00-0	1.3 J	0.80	2.0	1

The GC/MS semivolatile internal standard peak areas are outside of QC limits. The matrix spike sample was analyzed and internal standard peak areas are again outside of QC limits, indicating a matrix effect.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.3
10401	Dalapon	75-99-0	5.3 U	5.3	11
10401	2,4-DB	94-82-6	3.7 U	3.7	3.7
10401	Dicamba	1918-00-9	0.48 U	0.48	1.4
10401	Dinoseb	88-85-7	0.96 U	0.96	2.9
10401	2,4-DP (Dichlorprop)	120-36-5	0.96 U	0.96	2.0
10401	MCPA	94-74-6	91 U	91	300
10401	MCPP (Mecoprop)	93-65-2	90 U	90	300
10401	2,4,5-T	93-76-5	0.098 U	0.098	0.20
10401	2,4,5-TP	93-72-1	0.090 U	0.090	0.20

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs						
	SW-846 8081A		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.079 U	0.079	0.20	1
01363	Alpha BHC	319-84-6	0.041 U	0.041	0.20	1
01363	Beta BHC	319-85-7	0.072 U	0.072	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.041 U	0.041	0.20	1
01363	Chlordane	57-74-9	0.96 U	0.96	4.1	1
01363	p,p-DDD	72-54-8	0.079 U	0.079	0.41	1
01363	p,p-DDE	72-55-9	0.39 U	0.39	0.41	1
01363	p,p-DDT	50-29-3	0.55 U	0.55	0.55	1
01363	Delta BHC	319-86-8	0.043 U	0.043	0.20	1
01363	Dieldrin	60-57-1	0.079 U	0.079	0.41	1
01363	Endosulfan I	959-98-8	0.057 U	0.057	0.20	1
01363	Endosulfan II	33213-65-9	0.079 U	0.079	0.41	1
01363	Endosulfan Sulfate	1031-07-8	0.27 U	0.27	0.41	1
01363	Endrin	72-20-8	0.079 U	0.079	0.41	1
01363	Endrin Aldehyde	7421-93-4	0.079 U	0.079	0.41	1
01363	Endrin Ketone	53494-70-5	0.079 U	0.079	0.41	1
01363	Heptachlor	76-44-8	0.072 U	0.072	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.041 U	0.041	0.20	1
01363	Methoxychlor	72-43-5	0.41 U	0.41	2.0	1
01363	Mirex	2385-85-5	0.13 U	0.13	0.41	1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.9	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.9	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.9	1
10225	Aroclor 5460	11126-42-4	1.3 J	1.2	3.9	1
10225	PCB-1016	12674-11-2	0.39 U	0.39	2.0	1
10225	PCB-1221	11104-28-2	0.60 U	0.60	2.0	1
10225	PCB-1232	11141-16-5	0.62 U	0.62	2.0	1
10225	PCB-1242	53469-21-9	0.60 U	0.60	2.0	1
10225	PCB-1248	12672-29-6	0.39 U	0.39	2.0	1
10225	PCB-1254	11097-69-1	0.39 U	0.39	2.0	1
10225	PCB-1260	11096-82-5	0.65 J	0.39	2.0	1
10225	PCB-1262	37324-23-5	0.39 U	0.39	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	PCB-1268	11100-14-4	0.39 U	0.39	2.0	1
The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,600	5.73	22.8	1
07914	Boron	7440-42-8	4.65 J	1.01	5.70	1
01650	Calcium	7440-70-2	2,940	6.98	22.8	1
01654	Iron	7439-89-6	22,100	5.37	22.8	1
01656	Lithium	7439-93-2	29.2	0.25	2.3	1
01657	Magnesium	7439-95-4	6,260	2.89	11.4	1
06958	Manganese	7439-96-5	332	0.0889	0.570	1
10145	Phosphorus	7723-14-0	501	0.638	11.4	1
01662	Potassium	7440-09-7	3,940	20.5	57.0	1
01667	Sodium	7440-23-5	74.9 J	42.5	114	1
07968	Strontium	7440-24-6	13.6	0.0706	0.570	1
06969	Tin	7440-31-5	2.11 J	1.14	11.4	1
06970	Titanium	7440-32-6	1,360	0.433	1.14	1
10146	Zirconium	7440-67-7	4.42 J	0.957	5.70	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.111 J	0.0704	0.235	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.18	0.0704	0.469	2
06126	Barium	7440-39-3	104	0.127	0.469	2
06127	Beryllium	7440-41-7	0.574	0.0188	0.117	2
06128	Cadmium	7440-43-9	0.233	0.0422	0.117	2
06131	Chromium	7440-47-3	20.4	0.141	0.469	2
06132	Cobalt	7440-48-4	5.89	0.0235	0.117	2
06133	Copper	7440-50-8	8.69	0.0774	0.469	2
06135	Lead	7439-92-1	10.0	0.0122	0.235	2
06138	Molybdenum	7439-98-7	0.457	0.0586	0.117	2
06139	Nickel	7440-02-0	12.1	0.117	0.469	2
06141	Selenium	7782-49-2	0.153 J	0.0469	0.469	2
06142	Silver	7440-22-4	0.0286 J	0.0141	0.117	2
06145	Thallium	7440-28-0	0.296	0.0352	0.117	2
06148	Vanadium	7440-62-2	42.4	0.0258	0.117	2
06149	Zinc	7440-66-6	70.9	0.657	3.52	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0033 U	0.0033	0.114	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1 J	0.96	1.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 314.0						
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8 U ug/kg	10.8 ug/kg	35.9 ug/kg	1
SW-846 7199						
05892	3a Cr VI by EPA 7199	18540-29-9	0.25 J mg/kg	0.24 mg/kg	1.2 mg/kg	1
ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	536 mV	10.0 mV	10.0 mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	6.51 Std. Units	0.0100 Std. Units	0.0100 Std. Units	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	16.4 %	0.50 %	0.50 %	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 03:47	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 01:27	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 16:03	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 10:35	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 18:59	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:01	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:01	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:01	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:46	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 09:49	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 17:51	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 20:57	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900	20	200	1
04688	Acenaphthylene	208-96-8	2,000	20	200	1
04688	Aniline	62-53-3	1,500	200	600	1
04688	Anthracene	120-12-7	1,900	20	200	1
04688	Benziidine	92-87-5	2,500	J 1,400	4,000	1
04688	Benzo(a)anthracene	56-55-3	1,900	20	200	1
04688	Benzo(a)pyrene	50-32-8	1,700	20	200	1
04688	Benzo(b)fluoranthene	205-99-2	1,600	20	200	1
04688	Benzo(g,h,i)perylene	191-24-2	1,700	20	200	1
04688	Benzo(k)fluoranthene	207-08-9	1,800	20	200	1
04688	Benzoic acid	65-85-0	2,100	200	600	1
04688	Benzyl alcohol	100-51-6	2,000	200	600	1
04688	4-Bromophenyl-phenylether	101-55-3	1,900	20	200	1
04688	Butylbenzylphthalate	85-68-7	2,000	20	200	1
04688	Di-n-butylphthalate	84-74-2	1,900	20	200	1
04688	Carbazole	86-74-8	1,900	20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	1,900	40	200	1
04688	4-Chloroaniline	106-47-8	1,000	80	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,900	20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,800	20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800	20	200	1
04688	2-Chloronaphthalene	91-58-7	1,600	20	200	1
04688	2-Chlorophenol	95-57-8	2,000	20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900	40	200	1
04688	Chrysene	218-01-9	2,000	20	200	1
04688	Dibenz(a,h)anthracene	53-70-3	1,700	20	200	1
04688	Dibenzofuran	132-64-9	1,900	20	200	1
04688	1,2-Dichlorobenzene	95-50-1	1,800	20	200	1
04688	1,3-Dichlorobenzene	541-73-1	1,700	20	200	1
04688	1,4-Dichlorobenzene	106-46-7	1,700	20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,600	120	400	1
04688	2,4-Dichlorophenol	120-83-2	1,900	20	200	1
04688	Diethylphthalate	84-66-2	1,900	20	200	1
04688	2,4-Dimethylphenol	105-67-9	1,900	40	200	1
04688	3,5-Dimethylphenol	108-68-9	2,000	40	200	1
04688	Dimethylphthalate	131-11-3	1,900	20	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,800	200	600	1
04688	2,4-Dinitrophenol	51-28-5	3,300	800	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	1,900	40	200	1
04688	2,6-Dinitrotoluene	606-20-2	1,900	20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	2,000	20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	20	400	1
04688	Fluoranthene	206-44-0	2,000	20	200	1
04688	Fluorene	86-73-7	1,900	20	200	1
04688	Hexachlorobenzene	118-74-1	2,000	20	200	1
04688	Hexachlorobutadiene	87-68-3	1,800	80	200	1
04688	Hexachlorocyclopentadiene	77-47-4	3,200	200	600	1
04688	Hexachloroethane	67-72-1	1,500	20	200	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,700	20	200	1
04688	Isophorone	78-59-1	1,800	20	200	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,900	20	200	1
04688	2-Methylnaphthalene	91-57-6	1,800	20	200	1
04688	2-Methylphenol	95-48-7	2,000	40	200	1
04688	4-Methylphenol	106-44-5	1,900	40	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,900	20	200	1
04688	2-Nitroaniline	88-74-4	2,000	20	200	1
04688	3-Nitroaniline	99-09-2	1,900	40	200	1
04688	4-Nitroaniline	100-01-6	1,600	80	200	1
04688	Nitrobenzene	98-95-3	1,800	20	200	1
04688	2-Nitrophenol	88-75-5	1,900	20	200	1
04688	4-Nitrophenol	100-02-7	1,700	200	600	1
04688	N-Nitrosodimethylamine	62-75-9	1,700	40	200	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	2,000	20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,900	20	200	1
04688	Pentachlorophenol	87-86-5	2,100	200	600	1
04688	Phenanthrene	85-01-8	1,900	20	200	1
04688	Phenol	108-95-2	1,900	20	200	1
04688	Pyrene	129-00-0	2,000	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,800	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	1,900	40	200	1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	40	200	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	37	0.80	2.0	1
10138	Acenaphthylene	208-96-8	38	0.40	2.0	1
10138	Anthracene	120-12-7	37	0.40	2.0	1
10138	Benzo(a)anthracene	56-55-3	40	0.80	2.0	1
10138	Benzo(a)pyrene	50-32-8	39	0.80	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	43	0.80	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	12	0.80	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	49	0.80	2.0	1
10138	Butylbenzylphthalate	85-68-7	68	7.2	22	1
10138	Di-n-butylphthalate	84-74-2	45	7.2	22	1
10138	Chrysene	218-01-9	37	0.40	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	19	0.80	2.0	1
10138	Diethylphthalate	84-66-2	42	7.2	22	1
10138	Dimethylphthalate	131-11-3	42	7.2	22	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	64	7.2	22	1
10138	Fluoranthene	206-44-0	41	0.80	2.0	1
10138	Fluorene	86-73-7	38	0.80	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	17	0.80	2.0	1
10138	1-Methylnaphthalene	90-12-0	36	0.80	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	2-Methylnaphthalene	91-57-6	33	0.80	2.0	1
10138	Naphthalene	91-20-3	44	0.80	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	43	0.80	2.0	1
10138	Di-n-octylphthalate	117-84-0	98	7.2	22	1
10138	Phenanthrene	85-01-8	37	0.80	2.0	1
10138	Pyrene	129-00-0	50	0.80	2.0	1

The GC/MS semivolatile internal standard peak areas are outside of QC limits. The background sample was analyzed and internal standard peak areas are again outside of QC limits, indicating a matrix effect.

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	10		1.4	4.3	1
10401	Dalapon	75-99-0	14		5.3	11	1
10401	2,4-DB	94-82-6	16		0.74	2.0	1
10401	Dicamba	1918-00-9	0.72	J	0.48	1.4	1
10401	Dinoseb	88-85-7	1.7	J	0.96	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	14		0.96	2.0	1
10401	MCPA	94-74-6	910		91	300	1
10401	MCPP (Mecoprop)	93-65-2	380		90	300	1
10401	2,4,5-T	93-76-5	0.60		0.098	0.20	1
10401	2,4,5-TP	93-72-1	0.83		0.090	0.20	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs		SW-846 8081A	ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.41		0.079	0.20	1
01363	Alpha BHC	319-84-6	0.36		0.041	0.20	1
01363	Beta BHC	319-85-7	0.22		0.072	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.36		0.041	0.20	1
01363	Chlordane	57-74-9	0.96	U	0.96	4.1	1
01363	p,p-DDD	72-54-8	0.68		0.079	0.41	1
01363	p,p-DDE	72-55-9	1.3		0.079	0.41	1
01363	p,p-DDT	50-29-3	1.1		0.079	0.41	1
01363	Delta BHC	319-86-8	0.45		0.043	0.20	1
01363	Dieldrin	60-57-1	0.60		0.079	0.41	1
01363	Endosulfan I	959-98-8	0.31		0.053	0.20	1
01363	Endosulfan II	33213-65-9	0.80		0.079	0.41	1
01363	Endosulfan Sulfate	1031-07-8	1.0		0.079	0.41	1
01363	Endrin	72-20-8	0.73		0.079	0.41	1
01363	Endrin Aldehyde	7421-93-4	0.51		0.079	0.41	1
01363	Endrin Ketone	53494-70-5	0.80		0.079	0.41	1
01363	Heptachlor	76-44-8	0.30		0.072	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.39		0.041	0.20	1
01363	Methoxychlor	72-43-5	3.5		0.41	2.0	1
01363	Mirex	2385-85-5	0.079	U	0.079	0.41	1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.9	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.9	1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.9	1
10225	PCB-1016	12674-11-2	23	0.39	2.0	1
10225	PCB-1221	11104-28-2	0.60 U	0.60	2.0	1
10225	PCB-1232	11141-16-5	0.62 U	0.62	2.0	1
10225	PCB-1242	53469-21-9	0.60 U	0.60	2.0	1
10225	PCB-1248	12672-29-6	0.39 U	0.39	2.0	1
10225	PCB-1254	11097-69-1	0.39 U	0.39	2.0	1
10225	PCB-1260	11096-82-5	30	0.39	2.0	1
10225	PCB-1262	37324-23-5	0.39 U	0.39	2.0	1
10225	PCB-1268	11100-14-4	0.39 U	0.39	2.0	1
The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,300	5.96	23.7	1
07914	Boron	7440-42-8	227	1.05	5.92	1
01650	Calcium	7440-70-2	3,670	7.26	23.7	1
01654	Iron	7439-89-6	21,100	5.58	23.7	1
01656	Lithium	7439-93-2	144	0.26	2.4	1
01657	Magnesium	7439-95-4	6,210	3.01	11.8	1
06958	Manganese	7439-96-5	361	0.0924	0.592	1
10145	Phosphorus	7723-14-0	599	0.663	11.8	1
01662	Potassium	7440-09-7	5,060	21.3	59.2	1
01667	Sodium	7440-23-5	1,280	44.2	118	1
07968	Strontium	7440-24-6	128	0.0734	0.592	1
06969	Tin	7440-31-5	419	1.18	11.8	1
06970	Titanium	7440-32-6	1,580	0.450	1.18	1
10146	Zirconium	7440-67-7	115	0.995	5.92	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.632	0.0697	0.232	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.68	0.0697	0.465	2
06126	Barium	7440-39-3	139	0.125	0.465	2
06127	Beryllium	7440-41-7	1.61	0.0186	0.116	2
06128	Cadmium	7440-43-9	1.89	0.0418	0.116	2
06131	Chromium	7440-47-3	37.8	0.139	0.465	2
06132	Cobalt	7440-48-4	74.5	0.0232	0.116	2
06133	Copper	7440-50-8	23.3	0.0766	0.465	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

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Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06135	Lead	7439-92-1	15.7	0.0121	0.232	2
06138	Molybdenum	7439-98-7	16.6	0.0581	0.116	2
06139	Nickel	7440-02-0	28.8	0.116	0.465	2
06141	Selenium	7782-49-2	2.59	0.0465	0.465	2
06142	Silver	7440-22-4	14.1	0.0139	0.116	2
06145	Thallium	7440-28-0	0.869	0.0348	0.116	2
06148	Vanadium	7440-62-2	63.9	0.0255	0.116	2
06149	Zinc	7440-66-6	97.2	0.650	3.48	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.204	0.0034	0.119	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.7	0.96	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	503	10.8	35.9	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	39.3	1.2	6.0	5
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 04:12	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 01:59	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 17:27	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 10:50	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 19:18	Lindsey K Lafferty	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
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Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

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Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:10	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:48	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 10:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 18:38	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 21:10	Carrie E Miller	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900	20	200	1
04688	Acenaphthylene	208-96-8	2,000	20	200	1
04688	Aniline	62-53-3	1,400	200	600	1
04688	Anthracene	120-12-7	1,900	20	200	1
04688	Benziidine	92-87-5	1,500	J 1,400	4,000	1
04688	Benzo(a)anthracene	56-55-3	1,900	20	200	1
04688	Benzo(a)pyrene	50-32-8	1,700	20	200	1
04688	Benzo(b)fluoranthene	205-99-2	1,700	20	200	1
04688	Benzo(g,h,i)perylene	191-24-2	1,700	20	200	1
04688	Benzo(k)fluoranthene	207-08-9	1,600	20	200	1
04688	Benzoic acid	65-85-0	2,100	200	600	1
04688	Benzyl alcohol	100-51-6	1,900	200	600	1
04688	4-Bromophenyl-phenylether	101-55-3	1,900	20	200	1
04688	Butylbenzylphthalate	85-68-7	1,900	20	200	1
04688	Di-n-butylphthalate	84-74-2	1,900	20	200	1
04688	Carbazole	86-74-8	2,000	20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	1,900	40	200	1
04688	4-Chloroaniline	106-47-8	1,200	80	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800	20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,800	20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,700	20	200	1
04688	2-Chloronaphthalene	91-58-7	1,600	20	200	1
04688	2-Chlorophenol	95-57-8	1,900	20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,800	40	200	1
04688	Chrysene	218-01-9	1,900	20	200	1
04688	Dibenz(a,h)anthracene	53-70-3	1,700	20	200	1
04688	Dibenzofuran	132-64-9	1,900	20	200	1
04688	1,2-Dichlorobenzene	95-50-1	1,600	20	200	1
04688	1,3-Dichlorobenzene	541-73-1	1,500	20	200	1
04688	1,4-Dichlorobenzene	106-46-7	1,600	20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,600	120	400	1
04688	2,4-Dichlorophenol	120-83-2	2,000	20	200	1
04688	Diethylphthalate	84-66-2	1,900	20	200	1
04688	2,4-Dimethylphenol	105-67-9	1,900	40	200	1
04688	3,5-Dimethylphenol	108-68-9	2,000	40	200	1
04688	Dimethylphthalate	131-11-3	1,900	20	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,800	200	600	1
04688	2,4-Dinitrophenol	51-28-5	3,200	800	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	1,900	40	200	1
04688	2,6-Dinitrotoluene	606-20-2	1,900	20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	2,000	20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	20	400	1
04688	Fluoranthene	206-44-0	2,000	20	200	1
04688	Fluorene	86-73-7	1,900	20	200	1
04688	Hexachlorobenzene	118-74-1	1,900	20	200	1
04688	Hexachlorobutadiene	87-68-3	1,700	80	200	1
04688	Hexachlorocyclopentadiene	77-47-4	2,700	200	600	1
04688	Hexachloroethane	67-72-1	1,400	20	200	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,700	20	200	1
04688	Isophorone	78-59-1	1,800	20	200	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,900	20	200	1
04688	2-Methylnaphthalene	91-57-6	1,800	20	200	1
04688	2-Methylphenol	95-48-7	1,900	40	200	1
04688	4-Methylphenol	106-44-5	1,900	40	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,800	20	200	1
04688	2-Nitroaniline	88-74-4	2,000	20	200	1
04688	3-Nitroaniline	99-09-2	1,900	40	200	1
04688	4-Nitroaniline	100-01-6	1,600	80	200	1
04688	Nitrobenzene	98-95-3	1,800	20	200	1
04688	2-Nitrophenol	88-75-5	1,900	20	200	1
04688	4-Nitrophenol	100-02-7	1,700	200	600	1
04688	N-Nitrosodimethylamine	62-75-9	1,600	40	200	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	1,900	20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,800	20	200	1
04688	Pentachlorophenol	87-86-5	2,300	200	600	1
04688	Phenanthrene	85-01-8	1,900	20	200	1
04688	Phenol	108-95-2	1,900	20	200	1
04688	Pyrene	129-00-0	1,900	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,800	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	1,900	40	200	1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	40	200	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	36	0.80	2.0	1
10138	Acenaphthylene	208-96-8	37	0.40	2.0	1
10138	Anthracene	120-12-7	37	0.40	2.0	1
10138	Benzo(a)anthracene	56-55-3	39	0.80	2.0	1
10138	Benzo(a)pyrene	50-32-8	38	0.80	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	44	0.80	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	14	0.80	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	52	0.80	2.0	1
10138	Butylbenzylphthalate	85-68-7	55	7.2	22	1
10138	Di-n-butylphthalate	84-74-2	45	7.2	22	1
10138	Chrysene	218-01-9	36	0.40	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	18	0.80	2.0	1
10138	Diethylphthalate	84-66-2	41	7.2	22	1
10138	Dimethylphthalate	131-11-3	41	7.2	22	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	64	7.2	22	1
10138	Fluoranthene	206-44-0	38	0.80	2.0	1
10138	Fluorene	86-73-7	38	0.80	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	17	0.80	2.0	1
10138	1-Methylnaphthalene	90-12-0	38	0.80	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM						
10138	2-Methylnaphthalene	91-57-6	35	0.80	2.0	1
10138	Naphthalene	91-20-3	41	0.80	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	40	0.80	2.0	1
10138	Di-n-octylphthalate	117-84-0	97	7.2	22	1
10138	Phenanthrene	85-01-8	37	0.80	2.0	1
10138	Pyrene	129-00-0	41	0.80	2.0	1
Herbicides SW-846 8151A						
10401	2,4-D	94-75-7	9.9	1.4	4.3	1
10401	Dalapon	75-99-0	26	5.3	11	1
10401	2,4-DB	94-82-6	14	0.74	2.0	1
10401	Dicamba	1918-00-9	0.74 J	0.48	1.4	1
10401	Dinoseb	88-85-7	1.7 J	0.96	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	11	0.96	2.0	1
10401	MCPA	94-74-6	1,300	91	300	1
10401	MCPP (Mecoprop)	93-65-2	270 J	90	300	1
10401	2,4,5-T	93-76-5	0.65	0.098	0.20	1
10401	2,4,5-TP	93-72-1	0.92	0.090	0.20	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.47	0.079	0.20	1
01363	Alpha BHC	319-84-6	0.30	0.041	0.20	1
01363	Beta BHC	319-85-7	0.19 J	0.072	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.35	0.041	0.20	1
01363	Chlordane	57-74-9	0.96 U	0.96	4.1	1
01363	p,p-DDD	72-54-8	0.78	0.079	0.41	1
01363	p,p-DDE	72-55-9	1.6	0.079	0.41	1
01363	p,p-DDT	50-29-3	1.4	0.079	0.41	1
01363	Delta BHC	319-86-8	0.36	0.043	0.20	1
01363	Dieldrin	60-57-1	0.77	0.079	0.41	1
01363	Endosulfan I	959-98-8	0.36	0.053	0.20	1
01363	Endosulfan II	33213-65-9	0.83	0.079	0.41	1
01363	Endosulfan Sulfate	1031-07-8	1.0	0.079	0.41	1
01363	Endrin	72-20-8	0.75	0.079	0.41	1
01363	Endrin Aldehyde	7421-93-4	0.53	0.079	0.41	1
01363	Endrin Ketone	53494-70-5	0.84	0.079	0.41	1
01363	Heptachlor	76-44-8	0.35	0.072	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.49	0.041	0.20	1
01363	Methoxychlor	72-43-5	5.3	0.41	2.0	1
01363	Mirex	2385-85-5	0.079 U	0.079	0.41	1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported.						
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.9	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.9	1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.9	1
10225	PCB-1016	12674-11-2	25	0.39	2.0	1
10225	PCB-1221	11104-28-2	0.60 U	0.60	2.0	1
10225	PCB-1232	11141-16-5	0.62 U	0.62	2.0	1
10225	PCB-1242	53469-21-9	0.60 U	0.60	2.0	1
10225	PCB-1248	12672-29-6	0.39 U	0.39	2.0	1
10225	PCB-1254	11097-69-1	0.39 U	0.39	2.0	1
10225	PCB-1260	11096-82-5	31	0.39	2.0	1
10225	PCB-1262	37324-23-5	0.39 U	0.39	2.0	1
10225	PCB-1268	11100-14-4	0.39 U	0.39	2.0	1
The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,900	5.96	23.7	1
07914	Boron	7440-42-8	222	1.05	5.92	1
01650	Calcium	7440-70-2	3,630	7.26	23.7	1
01654	Iron	7439-89-6	20,300	5.58	23.7	1
01656	Lithium	7439-93-2	139	0.26	2.4	1
01657	Magnesium	7439-95-4	6,070	3.01	11.8	1
06958	Manganese	7439-96-5	356	0.0924	0.592	1
10145	Phosphorus	7723-14-0	597	0.663	11.8	1
01662	Potassium	7440-09-7	4,990	21.3	59.2	1
01667	Sodium	7440-23-5	1,240	44.2	118	1
07968	Strontium	7440-24-6	125	0.0734	0.592	1
06969	Tin	7440-31-5	412	1.18	11.8	1
06970	Titanium	7440-32-6	1,580	0.450	1.18	1
10146	Zirconium	7440-67-7	113	0.995	5.92	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.728	0.0690	0.230	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.8	0.0690	0.460	2
06126	Barium	7440-39-3	133	0.124	0.460	2
06127	Beryllium	7440-41-7	1.59	0.0184	0.115	2
06128	Cadmium	7440-43-9	1.79	0.0414	0.115	2
06131	Chromium	7440-47-3	39.5	0.138	0.460	2
06132	Cobalt	7440-48-4	75.9	0.0230	0.115	2
06133	Copper	7440-50-8	23.9	0.0759	0.460	2
06135	Lead	7439-92-1	16.2	0.0120	0.230	2
06138	Molybdenum	7439-98-7	16.6	0.0575	0.115	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	
06139	Nickel	7440-02-0	28.5	0.115	0.460	2
06141	Selenium	7782-49-2	2.66	0.0460	0.460	2
06142	Silver	7440-22-4	14.0	0.0138	0.115	2
06145	Thallium	7440-28-0	0.865	0.0345	0.115	2
06148	Vanadium	7440-62-2	65.7	0.0253	0.115	2
06149	Zinc	7440-66-6	95.1	0.644	3.45	2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.192	0.0032	0.113	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 04:37	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 02:31	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 17:55	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 11:05	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 19:37	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:49	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Sample Description: SED-002-SIV-SD-0.0-0.5DUP Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172319
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,800	5.90	23.5	1
07914	Boron	7440-42-8	4.67 J	1.04	5.86	1
01650	Calcium	7440-70-2	2,870	7.19	23.5	1
01654	Iron	7439-89-6	20,200	5.52	23.5	1
01656	Lithium	7439-93-2	26.7	0.26	2.3	1
01657	Magnesium	7439-95-4	5,710	2.98	11.7	1
06958	Manganese	7439-96-5	300	0.0915	0.586	1
10145	Phosphorus	7723-14-0	485	0.657	11.7	1
01662	Potassium	7440-09-7	3,650	21.1	58.6	1
01667	Sodium	7440-23-5	70.9 J	43.7	117	1
07968	Strontium	7440-24-6	14.1	0.0727	0.586	1
06969	Tin	7440-31-5	1.96 J	1.17	11.7	1
06970	Titanium	7440-32-6	1,290	0.446	1.17	1
10146	Zirconium	7440-67-7	4.43 J	0.985	5.86	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.104 J	0.0704	0.235	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	6.73	0.0704	0.469	2
06126	Barium	7440-39-3	103	0.127	0.469	2
06127	Beryllium	7440-41-7	0.537	0.0188	0.117	2
06128	Cadmium	7440-43-9	0.215	0.0422	0.117	2
06131	Chromium	7440-47-3	20.2	0.141	0.469	2
06132	Cobalt	7440-48-4	6.22	0.0235	0.117	2
06133	Copper	7440-50-8	9.13	0.0774	0.469	2
06135	Lead	7439-92-1	9.73	0.0122	0.235	2
06138	Molybdenum	7439-98-7	0.467	0.0586	0.117	2
06139	Nickel	7440-02-0	12.8	0.117	0.469	2
06141	Selenium	7782-49-2	0.158 J	0.0469	0.469	2
06142	Silver	7440-22-4	0.0373 J	0.0141	0.117	2
06145	Thallium	7440-28-0	0.311	0.0352	0.117	2
06148	Vanadium	7440-62-2	42.5	0.0258	0.117	2
06149	Zinc	7440-66-6	73.9	0.657	3.52	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0033 U	0.0033	0.116	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.96 J	0.96	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8 U	10.8	35.9	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.54 J	0.24	1.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5DUP Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172319
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	541	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.46	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1
11626	28a Moisture Content by 160.3	n.a.	15.5	0.50	0.50	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:07	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5DUP Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172319
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED02 SDG#: DE050-02DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:07	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:07	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:47	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 10:03	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 18:15	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 21:59	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED15 SDG#: DE050-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	220	U 220	650	1
04688	Benzidine	92-87-5	1,500	U 1,500	4,300	1
04688	Benzoic acid	65-85-0	220	U 220	650	1
04688	Benzyl alcohol	100-51-6	220	U 220	650	1
04688	4-Bromophenyl-phenylether	101-55-3	22	U 22	220	1
04688	Carbazole	86-74-8	22	U 22	220	1
04688	4-Chloro-3-methylphenol	59-50-7	43	U 43	220	1
04688	4-Chloroaniline	106-47-8	87	U 87	220	1
04688	bis(2-Chloroethoxy)methane	111-91-1	22	U 22	220	1
04688	bis(2-Chloroethyl)ether	111-44-4	22	U 22	220	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	22	U 22	220	1
04688	2-Chloronaphthalene	91-58-7	22	U 22	220	1
04688	2-Chlorophenol	95-57-8	22	U 22	220	1
04688	4-Chlorophenyl-phenylether	7005-72-3	43	U 43	220	1
04688	Dibenzofuran	132-64-9	22	U 22	220	1
04688	1,2-Dichlorobenzene	95-50-1	22	U 22	220	1
04688	1,3-Dichlorobenzene	541-73-1	22	U 22	220	1
04688	1,4-Dichlorobenzene	106-46-7	22	U 22	220	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U 130	430	1
04688	2,4-Dichlorophenol	120-83-2	22	U 22	220	1
04688	2,4-Dimethylphenol	105-67-9	43	U 43	220	1
04688	3,5-Dimethylphenol	108-68-9	43	U 43	220	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	220	U 220	650	1
04688	2,4-Dinitrophenol	51-28-5	870	U 870	2,600	1
04688	2,4-Dinitrotoluene	121-14-2	43	U 43	220	1
04688	2,6-Dinitrotoluene	606-20-2	22	U 22	220	1
04688	1,2-Diphenylhydrazine	122-66-7	22	U 22	220	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	67	J 22	430	1
04688	Hexachlorobenzene	118-74-1	22	U 22	220	1
04688	Hexachlorobutadiene	87-68-3	87	U 87	220	1
04688	Hexachlorocyclopentadiene	77-47-4	220	U 220	650	1
04688	Hexachloroethane	67-72-1	22	U 22	220	1
04688	Isophorone	78-59-1	22	U 22	220	1
04688	2-Methylphenol	95-48-7	43	U 43	220	1
04688	4-Methylphenol	106-44-5	43	U 43	220	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	22	U 22	220	1
04688	3-Nitroaniline	99-09-2	43	U 43	220	1
04688	4-Nitroaniline	100-01-6	87	U 87	220	1
04688	Nitrobenzene	98-95-3	22	U 22	220	1
04688	2-Nitrophenol	88-75-5	22	U 22	220	1
04688	4-Nitrophenol	100-02-7	220	U 220	650	1
04688	N-Nitroso-di-n-propylamine	621-64-7	22	U 22	220	1
04688	N-Nitrosodiphenylamine	86-30-6	22	U 22	220	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	220	U 220	650	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED15 SDG#: DE050-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	22 U	22	220	1
04688	1,2,4-Trichlorobenzene	120-82-1	22 U	22	220	1
04688	2,4,5-Trichlorophenol	95-95-4	43 U	43	220	1
04688	2,4,6-Trichlorophenol	88-06-2	43 U	43	220	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.87 U	0.87	2.2	1
10138	Acenaphthylene	208-96-8	0.47 J	0.43	2.2	1
10138	Anthracene	120-12-7	0.43 U	0.43	2.2	1
10138	Benzo(a)anthracene	56-55-3	0.87 U	0.87	2.2	1
10138	Benzo(a)pyrene	50-32-8	0.87 U	0.87	2.2	1
10138	Benzo(b)fluoranthene	205-99-2	1.8 J	0.87	2.2	1
10138	Benzo(g,h,i)perylene	191-24-2	0.87 U	0.87	2.2	1
10138	Benzo(k)fluoranthene	207-08-9	1.1 J	0.87	2.2	1
10138	Butylbenzylphthalate	85-68-7	7.8 U	7.8	23	1
10138	Di-n-butylphthalate	84-74-2	7.8 U	7.8	23	1
10138	Chrysene	218-01-9	1.9 J	0.43	2.2	1
10138	Dibenz(a,h)anthracene	53-70-3	0.87 U	0.87	2.2	1
10138	Diethylphthalate	84-66-2	7.8 U	7.8	23	1
10138	Dimethylphthalate	131-11-3	7.8 U	7.8	23	1
10138	Fluoranthene	206-44-0	1.9 J	0.87	2.2	1
10138	Fluorene	86-73-7	0.87 U	0.87	2.2	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.87 U	0.87	2.2	1
10138	1-Methylnaphthalene	90-12-0	1.8 J	0.87	2.2	1
10138	2-Methylnaphthalene	91-57-6	2.3	0.87	2.2	1
10138	Naphthalene	91-20-3	4.3	0.87	2.2	1
10138	N-Nitrosodimethylamine	62-75-9	0.87 U	0.87	2.2	1
10138	Di-n-octylphthalate	117-84-0	7.8 U	7.8	23	1
10138	Phenanthrene	85-01-8	2.4	0.87	2.2	1
10138	Pyrene	129-00-0	1.5 J	0.87	2.2	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.6 U	1.6	4.7	1
10401	Dalapon	75-99-0	5.7 U	5.7	12	1
10401	2,4-DB	94-82-6	1.7 U	1.7	2.2	1
10401	Dicamba	1918-00-9	0.52 U	0.52	1.6	1
10401	Dinoseb	88-85-7	1.0 U	1.0	3.1	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0 U	1.0	2.2	1
10401	MCPA	94-74-6	99 U	99	330	1
10401	MCPP (Mecoprop)	93-65-2	98 U	98	330	1
10401	2,4,5-T	93-76-5	0.11 U	0.11	0.22	1
10401	2,4,5-TP	93-72-1	0.098 U	0.098	0.22	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

*=This limit was used in the evaluation of the final result

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED15 SDG#: DE050-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Aldrin	309-00-2	0.086 U	0.086	0.22	1
01363	Alpha BHC	319-84-6	0.044 U	0.044	0.22	1
01363	Beta BHC	319-85-7	0.13 U	0.13	0.22	1
01363	Gamma BHC - Lindane	58-89-9	0.044 U	0.044	0.22	1
01363	Chlordane	57-74-9	1.0 U	1.0	4.4	1
01363	p,p-DDD	72-54-8	0.086 U	0.086	0.44	1
01363	p,p-DDE	72-55-9	0.76 U	0.76	0.76	1
01363	p,p-DDT	50-29-3	0.89 U	0.89	0.89	1
01363	Delta BHC	319-86-8	0.11 J	0.047	0.22	1
01363	Dieldrin	60-57-1	0.086 U	0.086	0.44	1
01363	Endosulfan I	959-98-8	0.22 U	0.22	0.22	1
01363	Endosulfan II	33213-65-9	0.32 U	0.32	0.44	1
01363	Endosulfan Sulfate	1031-07-8	0.086 U	0.086	0.44	1
01363	Endrin	72-20-8	0.086 U	0.086	0.44	1
01363	Endrin Aldehyde	7421-93-4	0.53 U	0.53	0.53	1
01363	Endrin Ketone	53494-70-5	0.086 U	0.086	0.44	1
01363	Heptachlor	76-44-8	0.11 J	0.078	0.22	1
01363	Heptachlor Epoxide	1024-57-3	0.047 U	0.047	0.22	1
01363	Methoxychlor	72-43-5	1.1 U	1.1	2.2	1
01363	Mirex	2385-85-5	0.34 U	0.34	0.44	1
01363	Toxaphene	8001-35-2	2.9 U	2.9	8.6	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	1.3 U	1.3	4.3	1
10225	Aroclor 5442	12642-23-8	1.3 U	1.3	4.3	1
10225	Aroclor 5460	11126-42-4	1.6 J	1.3	4.3	1
10225	PCB-1016	12674-11-2	0.43 U	0.43	2.2	1
10225	PCB-1221	11104-28-2	0.65 U	0.65	2.2	1
10225	PCB-1232	11141-16-5	0.68 U	0.68	2.2	1
10225	PCB-1242	53469-21-9	0.65 U	0.65	2.2	1
10225	PCB-1248	12672-29-6	0.43 U	0.43	2.2	1
10225	PCB-1254	11097-69-1	2.4	0.43	2.2	1
10225	PCB-1260	11096-82-5	0.71 J	0.43	2.2	1
10225	PCB-1262	37324-23-5	0.43 U	0.43	2.2	1
10225	PCB-1268	11100-14-4	0.43 U	0.43	2.2	1

The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results

*=This limit was used in the evaluation of the final result

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED15 SDG#: DE050-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
between the extractions were similar. The first extraction is being reported.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,200	6.42	25.5	1
07914	Boron	7440-42-8	5.34 J	1.14	6.38	1
01650	Calcium	7440-70-2	5,080	7.83	25.5	1
01654	Iron	7439-89-6	15,300	6.01	25.5	1
01656	Lithium	7439-93-2	21.2	0.28	2.6	1
01657	Magnesium	7439-95-4	3,790	3.24	12.8	1
06958	Manganese	7439-96-5	257	0.0996	0.638	1
10145	Phosphorus	7723-14-0	399	0.715	12.8	1
01662	Potassium	7440-09-7	3,150	23.0	63.8	1
01667	Sodium	7440-23-5	72.3 J	47.6	128	1
07968	Strontium	7440-24-6	23.9	0.0791	0.638	1
06969	Tin	7440-31-5	2.15 J	1.28	12.8	1
06970	Titanium	7440-32-6	883	0.485	1.28	1
10146	Zirconium	7440-67-7	2.32 J	1.07	6.38	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0859 J	0.0774	0.258	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.6	0.0774	0.516	2
06126	Barium	7440-39-3	99.4	0.139	0.516	2
06127	Beryllium	7440-41-7	0.497	0.0206	0.129	2
06128	Cadmium	7440-43-9	0.191	0.0464	0.129	2
06131	Chromium	7440-47-3	18.7	0.155	0.516	2
06132	Cobalt	7440-48-4	5.55	0.0258	0.129	2
06133	Copper	7440-50-8	9.12	0.0851	0.516	2
06135	Lead	7439-92-1	13.2	0.0134	0.258	2
06138	Molybdenum	7439-98-7	0.513	0.0645	0.129	2
06139	Nickel	7440-02-0	12.7	0.129	0.516	2
06141	Selenium	7782-49-2	0.188 J	0.0516	0.516	2
06142	Silver	7440-22-4	0.0473 J	0.0155	0.129	2
06145	Thallium	7440-28-0	0.290	0.0387	0.129	2
06148	Vanadium	7440-62-2	36.1	0.0284	0.129	2
06149	Zinc	7440-66-6	73.3	0.722	3.87	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0053 J	0.0036	0.127	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2 J	1.0	1.3	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.7 U	11.7	39.1	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.26 U	0.26	1.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED15 SDG#: DE050-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	544	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.89	0.0100	0.0100	1
Wet Chemistry		EPA 160.3 modified	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	23.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 05:27	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 13:51	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 18:23	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 11:19	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 19:55	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED15 SDG#: DE050-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 11:11	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/04/2011 11:24	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 11:11	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 11:11	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:51	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 10:46	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 19:24	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 22:06	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172321
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED36 SDG#: DE050-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U 210	630	1
04688	Benzidine	92-87-5	1,500	U 1,500	4,200	1
04688	Benzoic acid	65-85-0	210	U 210	630	1
04688	Benzyl alcohol	100-51-6	210	U 210	630	1
04688	4-Bromophenyl-phenylether	101-55-3	21	U 21	210	1
04688	Butylbenzylphthalate	85-68-7	56	J 21	210	1
04688	Carbazole	86-74-8	21	U 21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	42	U 42	210	1
04688	4-Chloroaniline	106-47-8	84	U 84	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U 21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U 21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U 21	210	1
04688	2-Chloronaphthalene	91-58-7	21	U 21	210	1
04688	2-Chlorophenol	95-57-8	21	U 21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	42	U 42	210	1
04688	Dibenzofuran	132-64-9	21	U 21	210	1
04688	1,2-Dichlorobenzene	95-50-1	21	U 21	210	1
04688	1,3-Dichlorobenzene	541-73-1	21	U 21	210	1
04688	1,4-Dichlorobenzene	106-46-7	21	U 21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U 130	420	1
04688	2,4-Dichlorophenol	120-83-2	21	U 21	210	1
04688	2,4-Dimethylphenol	105-67-9	42	U 42	210	1
04688	3,5-Dimethylphenol	108-68-9	42	U 42	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U 210	630	1
04688	2,4-Dinitrophenol	51-28-5	840	U 840	2,500	1
04688	2,4-Dinitrotoluene	121-14-2	42	U 42	210	1
04688	2,6-Dinitrotoluene	606-20-2	21	U 21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	21	U 21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	48	J 21	420	1
04688	Hexachlorobenzene	118-74-1	21	U 21	210	1
04688	Hexachlorobutadiene	87-68-3	84	U 84	210	1
04688	Hexachlorocyclopentadiene	77-47-4	210	U 210	630	1
04688	Hexachloroethane	67-72-1	21	U 21	210	1
04688	Isophorone	78-59-1	21	U 21	210	1
04688	2-Methylphenol	95-48-7	42	U 42	210	1
04688	4-Methylphenol	106-44-5	42	U 42	210	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U 21	210	1
04688	3-Nitroaniline	99-09-2	42	U 42	210	1
04688	4-Nitroaniline	100-01-6	84	U 84	210	1
04688	Nitrobenzene	98-95-3	21	U 21	210	1
04688	2-Nitrophenol	88-75-5	21	U 21	210	1
04688	4-Nitrophenol	100-02-7	210	U 210	630	1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U 21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	21	U 21	210	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172321
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED36 SDG#: DE050-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Pentachlorophenol	87-86-5	210	U 210	630	1
04688	Phenol	108-95-2	21	U 21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	21	U 21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	42	U 42	210	1
04688	2,4,6-Trichlorophenol	88-06-2	42	U 42	210	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.84	U 0.84	2.1	1
10138	Acenaphthylene	208-96-8	0.46	J 0.42	2.1	1
10138	Anthracene	120-12-7	0.42	U 0.42	2.1	1
10138	Benzo(a)anthracene	56-55-3	0.84	U 0.84	2.1	1
10138	Benzo(a)pyrene	50-32-8	1.1	J 0.84	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	2.8	U 0.84	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	0.84	U 0.84	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	0.96	J 0.84	2.1	1
10138	Di-n-butylphthalate	84-74-2	7.6	U 7.6	23	1
10138	Chrysene	218-01-9	1.4	J 0.42	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	0.84	U 0.84	2.1	1
10138	Diethylphthalate	84-66-2	7.6	U 7.6	23	1
10138	Dimethylphthalate	131-11-3	7.6	U 7.6	23	1
10138	Fluoranthene	206-44-0	2.0	J 0.84	2.1	1
10138	Fluorene	86-73-7	0.84	U 0.84	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.84	U 0.84	2.1	1
10138	1-Methylnaphthalene	90-12-0	0.84	U 0.84	2.1	1
10138	2-Methylnaphthalene	91-57-6	0.84	U 0.84	2.1	1
10138	Naphthalene	91-20-3	1.9	J 0.84	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	0.84	U 0.84	2.1	1
10138	Di-n-octylphthalate	117-84-0	7.6	U 7.6	23	1
10138	Phenanthrene	85-01-8	1.4	J 0.84	2.1	1
10138	Pyrene	129-00-0	1.5	J 0.84	2.1	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.5	U 1.5	4.6	1
10401	Dalapon	75-99-0	5.6	U 5.6	11	1
10401	2,4-DB	94-82-6	2.7	U 2.7	2.7	1
10401	Dicamba	1918-00-9	0.51	U 0.51	1.5	1
10401	Dinoseb	88-85-7	1.0	U 1.0	3.0	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0	U 1.0	2.1	1
10401	MCPA	94-74-6	96	U 96	320	1
10401	MCPP (Mecoprop)	93-65-2	95	U 95	320	1
10401	2,4,5-T	93-76-5	0.10	U 0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.095	U 0.095	0.21	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172321
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED36 SDG#: DE050-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs SW-846 8081A ug/kg ug/kg ug/kg						
01363	Aldrin	309-00-2	0.083 U	0.083	0.21	1
01363	Alpha BHC	319-84-6	0.043 U	0.043	0.21	1
01363	Beta BHC	319-85-7	0.076 U	0.076	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.043 U	0.043	0.21	1
01363	Chlordane	57-74-9	1.0 U	1.0	4.3	1
01363	p,p-DDD	72-54-8	0.083 U	0.083	0.43	1
01363	p,p-DDE	72-55-9	0.39 U	0.39	0.43	1
01363	p,p-DDT	50-29-3	0.44 U	0.44	0.44	1
01363	Delta BHC	319-86-8	0.26	0.046	0.21	1
01363	Dieldrin	60-57-1	0.15 U	0.15	0.43	1
01363	Endosulfan I	959-98-8	0.056 U	0.056	0.21	1
01363	Endosulfan II	33213-65-9	0.083 U	0.083	0.43	1
01363	Endosulfan Sulfate	1031-07-8	0.32 U	0.32	0.43	1
01363	Endrin	72-20-8	0.083 U	0.083	0.43	1
01363	Endrin Aldehyde	7421-93-4	0.13 U	0.13	0.43	1
01363	Endrin Ketone	53494-70-5	0.083 U	0.083	0.43	1
01363	Heptachlor	76-44-8	0.076 U	0.076	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.13 U	0.13	0.21	1
01363	Methoxychlor	72-43-5	1.0 U	1.0	2.1	1
01363	Mirex	2385-85-5	0.083 U	0.083	0.43	1
01363	Toxaphene	8001-35-2	2.8 U	2.8	8.3	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	Aroclor 5432	63496-31-1	1.3 U	1.3	4.2	1
10225	Aroclor 5442	12642-23-8	1.3 U	1.3	4.2	1
10225	Aroclor 5460	11126-42-4	1.3 U	1.3	4.2	1
10225	PCB-1016	12674-11-2	0.42 U	0.42	2.1	1
10225	PCB-1221	11104-28-2	0.63 U	0.63	2.1	1
10225	PCB-1232	11141-16-5	0.66 U	0.66	2.1	1
10225	PCB-1242	53469-21-9	0.63 U	0.63	2.1	1
10225	PCB-1248	12672-29-6	0.42 U	0.42	2.1	1
10225	PCB-1254	11097-69-1	0.42 U	0.42	2.1	1
10225	PCB-1260	11096-82-5	0.77 J	0.42	2.1	1
10225	PCB-1262	37324-23-5	0.42 U	0.42	2.1	1
10225	PCB-1268	11100-14-4	0.42 U	0.42	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172321
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED36 SDG#: DE050-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	22,100	6.36	25.3	1
07914	Boron	7440-42-8	9.31	1.13	6.32	1
01650	Calcium	7440-70-2	5,580	7.75	25.3	1
01654	Iron	7439-89-6	31,800	5.95	25.3	1
01656	Lithium	7439-93-2	42.9	0.28	2.5	1
01657	Magnesium	7439-95-4	7,270	3.21	12.6	1
06958	Manganese	7439-96-5	389	0.0986	0.632	1
10145	Phosphorus	7723-14-0	561	0.708	12.6	1
01662	Potassium	7440-09-7	4,840	22.8	63.2	1
01667	Sodium	7440-23-5	93.5 J	47.2	126	1
07968	Strontium	7440-24-6	20.4	0.0784	0.632	1
06969	Tin	7440-31-5	3.30 J	1.26	12.6	1
06970	Titanium	7440-32-6	1,440	0.480	1.26	1
10146	Zirconium	7440-67-7	5.96 J	1.06	6.32	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.203 J	0.0744	0.248	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	15.7	0.0744	0.496	2
06126	Barium	7440-39-3	154	0.134	0.496	2
06127	Beryllium	7440-41-7	1.07	0.0198	0.124	2
06128	Cadmium	7440-43-9	0.285	0.0446	0.124	2
06131	Chromium	7440-47-3	41.7	0.149	0.496	2
06132	Cobalt	7440-48-4	13.1	0.0248	0.124	2
06133	Copper	7440-50-8	22.4	0.0818	0.496	2
06135	Lead	7439-92-1	18.6	0.0129	0.248	2
06138	Molybdenum	7439-98-7	0.783	0.0620	0.124	2
06139	Nickel	7440-02-0	28.0	0.124	0.496	2
06141	Selenium	7782-49-2	0.490 J	0.0496	0.496	2
06142	Silver	7440-22-4	0.161	0.0149	0.124	2
06145	Thallium	7440-28-0	0.585	0.0372	0.124	2
06148	Vanadium	7440-62-2	79.5	0.0273	0.124	2
06149	Zinc	7440-66-6	142	0.694	3.72	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0109 J	0.0034	0.118	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	1.0	1.3	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.4 U	11.4	37.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
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LLI Sample # SW 6172321
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SED36 SDG#: DE050-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry SW-846 7199						
05892	3a Cr VI by EPA 7199	18540-29-9	0.43 J	0.25	1.3	1
ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	524	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	7.19	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	20.9	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 05:52	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 14:24	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 18:51	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 11:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 20:14	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
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LLI Sample # SW 6172321
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SED36 SDG#: DE050-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 11:14	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 11:14	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 11:14	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:54	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 11:00	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 20:10	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 22:24	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED38 SDG#: DE050-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570	1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U 190	570	1
04688	Benzyl alcohol	100-51-6	190	U 190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190	1
04688	4-Chloroaniline	106-47-8	76	U 76	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570	1
04688	2,4-Dinitrophenol	51-28-5	760	U 760	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	30	J 19	380	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	38	U 38	190	1
04688	4-Methylphenol	106-44-5	38	U 38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	38	U 38	190	1
04688	4-Nitroaniline	100-01-6	76	U 76	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	570	1

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SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED38 SDG#: DE050-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19 U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19 U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38 U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38 U	38	190	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76 U	0.76	1.9	1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9	1
10138	Anthracene	120-12-7	0.39 J	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	1.2 J	0.76	1.9	1
10138	Benzo(a)pyrene	50-32-8	1.3 J	0.76	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	2.4	0.76	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.76 U	0.76	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	1.3 J	0.76	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.9 U	6.9	21	1
10138	Di-n-butylphthalate	84-74-2	15 J	6.9	21	1
10138	Chrysene	218-01-9	2.8	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9	1
10138	Diethylphthalate	84-66-2	6.9 U	6.9	21	1
10138	Dimethylphthalate	131-11-3	6.9 U	6.9	21	1
10138	Fluoranthene	206-44-0	6.8	0.76	1.9	1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76 U	0.76	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9	1
10138	Naphthalene	91-20-3	1.5 J	0.76	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21	1
10138	Phenanthrene	85-01-8	2.8	0.76	1.9	1
10138	Pyrene	129-00-0	4.6	0.76	1.9	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	3.0 J	1.4	4.1	1
10401	Dalapon	75-99-0	5.0 U	5.0	10	1
10401	2,4-DB	94-82-6	0.71 U	0.71	1.9	1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4	1
10401	Dinoseb	88-85-7	0.92 U	0.92	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92 U	0.92	1.9	1
10401	MCPA	94-74-6	87 U	87	290	1
10401	MCPP (Mecoprop)	93-65-2	270 U	270	290	1
10401	2,4,5-T	93-76-5	0.094 U	0.094	0.19	1
10401	2,4,5-TP	93-72-1	0.086 U	0.086	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

MCPP was detected in the method blank. MCPP was not detected in the reextracted blank. The hold time had expired prior to the reextraction so all results are reported from the original extract. The results between

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SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED38 SDG#: DE050-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
extractions were slightly dissimilar because of the homogeneity of the sample.						
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.						
Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19	1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19	1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19	1
01363	Chlordane	57-74-9	0.92 U	0.92	3.9	1
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39	1
01363	p,p-DDE	72-55-9	0.27 U	0.27	0.39	1
01363	p,p-DDT	50-29-3	0.28 U	0.28	0.39	1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19	1
01363	Dieldrin	60-57-1	0.076 U	0.076	0.39	1
01363	Endosulfan I	959-98-8	0.058 U	0.058	0.19	1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39	1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39	1
01363	Endrin	72-20-8	0.076 U	0.076	0.39	1
01363	Endrin Aldehyde	7421-93-4	0.076 U	0.076	0.39	1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39	1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19	1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9	1
01363	Mirex	2385-85-5	0.076 U	0.076	0.39	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported.						
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	2.8 J	1.1	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.57 U	0.57	1.9	1
10225	PCB-1232	11141-16-5	0.59 U	0.59	1.9	1
10225	PCB-1242	53469-21-9	0.57 U	0.57	1.9	1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9	1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9	1
10225	PCB-1260	11096-82-5	1.0 J	0.38	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED38 SDG#: DE050-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8082 ug/kg ug/kg ug/kg						
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9	1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9	1
The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals SW-846 6010B mg/kg mg/kg mg/kg						
01643	Aluminum	7429-90-5	12,600	5.76	22.9	1
07914	Boron	7440-42-8	4.94 J	1.02	5.72	1
01650	Calcium	7440-70-2	2,530	7.01	22.9	1
01654	Iron	7439-89-6	17,600	5.39	22.9	1
01656	Lithium	7439-93-2	19.7	0.25	2.3	1
01657	Magnesium	7439-95-4	4,300	2.91	11.4	1
06958	Manganese	7439-96-5	267	0.0892	0.572	1
10145	Phosphorus	7723-14-0	362	0.641	11.4	1
01662	Potassium	7440-09-7	3,270	20.6	57.2	1
01667	Sodium	7440-23-5	61.9 J	42.7	114	1
07968	Strontium	7440-24-6	14.3	0.0709	0.572	1
06969	Tin	7440-31-5	2.03 J	1.14	11.4	1
06970	Titanium	7440-32-6	1,030	0.435	1.14	1
10146	Zirconium	7440-67-7	2.81 J	0.961	5.72	1
SW-846 6020 mg/kg mg/kg mg/kg						
06124	Antimony	7440-36-0	0.0951 J	0.0673	0.224	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.11	0.0673	0.449	2
06126	Barium	7440-39-3	106	0.121	0.449	2
06127	Beryllium	7440-41-7	0.555	0.0179	0.112	2
06128	Cadmium	7440-43-9	0.248	0.0404	0.112	2
06131	Chromium	7440-47-3	24.0	0.135	0.449	2
06132	Cobalt	7440-48-4	6.49	0.0224	0.112	2
06133	Copper	7440-50-8	9.33	0.0740	0.449	2
06135	Lead	7439-92-1	12.0	0.0117	0.224	2
06138	Molybdenum	7439-98-7	0.560	0.0561	0.112	2
06139	Nickel	7440-02-0	13.7	0.112	0.449	2
06141	Selenium	7782-49-2	0.161 J	0.0449	0.449	2
06142	Silver	7440-22-4	0.0475 J	0.0135	0.112	2
06145	Thallium	7440-28-0	0.267	0.0337	0.112	2
06148	Vanadium	7440-62-2	44.4	0.0247	0.112	2
06149	Zinc	7440-66-6	76.5	0.628	3.37	2
SW-846 7471A mg/kg mg/kg mg/kg						
00159	Mercury	7439-97-6	0.0059 J	0.0033	0.114	1
Wet Chemistry EPA 300.0 mg/kg mg/kg mg/kg						
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.92	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
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LLI Sample # SW 6172322
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SED38 SDG#: DE050-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 314.0						
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.3	1
SW-846 7199						
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.1	1
ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	527	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	6.94	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 06:18	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 14:56	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 19:19	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 11:49	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/12/2011 02:47	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1

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Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
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LLI Sample # SW 6172322
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SED38 SDG#: DE050-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 11:17	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 11:17	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 11:17	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:55	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 11:14	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 20:33	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 22:31	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED38 SDG#: DE050-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED39 SDG#: DE050-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	220	U 220	660	1
04688	Benzidine	92-87-5	1,500	U 1,500	4,400	1
04688	Benzoic acid	65-85-0	220	U 220	660	1
04688	Benzyl alcohol	100-51-6	220	U 220	660	1
04688	4-Bromophenyl-phenylether	101-55-3	22	U 22	220	1
04688	Carbazole	86-74-8	22	U 22	220	1
04688	4-Chloro-3-methylphenol	59-50-7	44	U 44	220	1
04688	4-Chloroaniline	106-47-8	88	U 88	220	1
04688	bis(2-Chloroethoxy)methane	111-91-1	22	U 22	220	1
04688	bis(2-Chloroethyl)ether	111-44-4	22	U 22	220	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	22	U 22	220	1
04688	2-Chloronaphthalene	91-58-7	22	U 22	220	1
04688	2-Chlorophenol	95-57-8	22	U 22	220	1
04688	4-Chlorophenyl-phenylether	7005-72-3	44	U 44	220	1
04688	Dibenzofuran	132-64-9	22	U 22	220	1
04688	1,2-Dichlorobenzene	95-50-1	22	U 22	220	1
04688	1,3-Dichlorobenzene	541-73-1	22	U 22	220	1
04688	1,4-Dichlorobenzene	106-46-7	22	U 22	220	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U 130	440	1
04688	2,4-Dichlorophenol	120-83-2	22	U 22	220	1
04688	2,4-Dimethylphenol	105-67-9	44	U 44	220	1
04688	3,5-Dimethylphenol	108-68-9	44	U 44	220	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	220	U 220	660	1
04688	2,4-Dinitrophenol	51-28-5	880	U 880	2,700	1
04688	2,4-Dinitrotoluene	121-14-2	44	U 44	220	1
04688	2,6-Dinitrotoluene	606-20-2	22	U 22	220	1
04688	1,2-Diphenylhydrazine	122-66-7	22	U 22	220	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	33	J 22	440	1
04688	Hexachlorobenzene	118-74-1	22	U 22	220	1
04688	Hexachlorobutadiene	87-68-3	88	U 88	220	1
04688	Hexachlorocyclopentadiene	77-47-4	220	U 220	660	1
04688	Hexachloroethane	67-72-1	22	U 22	220	1
04688	Isophorone	78-59-1	22	U 22	220	1
04688	2-Methylphenol	95-48-7	44	U 44	220	1
04688	4-Methylphenol	106-44-5	44	U 44	220	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	22	U 22	220	1
04688	3-Nitroaniline	99-09-2	44	U 44	220	1
04688	4-Nitroaniline	100-01-6	88	U 88	220	1
04688	Nitrobenzene	98-95-3	22	U 22	220	1
04688	2-Nitrophenol	88-75-5	22	U 22	220	1
04688	4-Nitrophenol	100-02-7	220	U 220	660	1
04688	N-Nitroso-di-n-propylamine	621-64-7	22	U 22	220	1
04688	N-Nitrosodiphenylamine	86-30-6	22	U 22	220	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	220	U 220	660	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED39 SDG#: DE050-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	22 U	22	220	1
04688	1,2,4-Trichlorobenzene	120-82-1	22 U	22	220	1
04688	2,4,5-Trichlorophenol	95-95-4	44 U	44	220	1
04688	2,4,6-Trichlorophenol	88-06-2	44 U	44	220	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.88 U	0.88	2.2	1
10138	Acenaphthylene	208-96-8	0.44 U	0.44	2.2	1
10138	Anthracene	120-12-7	0.44 U	0.44	2.2	1
10138	Benzo(a)anthracene	56-55-3	0.88 U	0.88	2.2	1
10138	Benzo(a)pyrene	50-32-8	1.1 J	0.88	2.2	1
10138	Benzo(b)fluoranthene	205-99-2	2.7	0.88	2.2	1
10138	Benzo(g,h,i)perylene	191-24-2	0.88 U	0.88	2.2	1
10138	Benzo(k)fluoranthene	207-08-9	0.91 J	0.88	2.2	1
10138	Butylbenzylphthalate	85-68-7	17 J	8.0	24	1
10138	Di-n-butylphthalate	84-74-2	8.0 U	8.0	24	1
10138	Chrysene	218-01-9	2.2 J	0.44	2.2	1
10138	Dibenz(a,h)anthracene	53-70-3	0.88 U	0.88	2.2	1
10138	Diethylphthalate	84-66-2	8.0 U	8.0	24	1
10138	Dimethylphthalate	131-11-3	8.0 U	8.0	24	1
10138	Fluoranthene	206-44-0	2.0 J	0.88	2.2	1
10138	Fluorene	86-73-7	2.0 J	0.88	2.2	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.88 U	0.88	2.2	1
10138	1-Methylnaphthalene	90-12-0	0.88 U	0.88	2.2	1
10138	2-Methylnaphthalene	91-57-6	0.88 U	0.88	2.2	1
10138	Naphthalene	91-20-3	1.7 J	0.88	2.2	1
10138	N-Nitrosodimethylamine	62-75-9	0.88 U	0.88	2.2	1
10138	Di-n-octylphthalate	117-84-0	8.0 U	8.0	24	1
10138	Phenanthrene	85-01-8	1.6 J	0.88	2.2	1
10138	Pyrene	129-00-0	1.4 J	0.88	2.2	1
Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg		
10401	2,4-D	94-75-7	1.6 U	1.6	4.8	1
10401	Dalapon	75-99-0	5.8 U	5.8	12	1
10401	2,4-DB	94-82-6	5.6	0.82	2.3	1
10401	Dicamba	1918-00-9	0.53 U	0.53	1.6	1
10401	Dinoseb	88-85-7	1.1 U	1.1	3.2	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.1 U	1.1	2.3	1
10401	MCPA	94-74-6	460	100	330	1
10401	MCPP (Mecoprop)	93-65-2	99 U	99	330	1
10401	2,4,5-T	93-76-5	0.11 U	0.11	0.23	1
10401	2,4,5-TP	93-72-1	0.099 U	0.099	0.23	1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	SW-846 8081A	ug/kg	ug/kg	ug/kg		
01363	Aldrin	309-00-2	0.13 J	0.088	0.22	1
01363	Alpha BHC	319-84-6	0.045 U	0.045	0.22	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED39 SDG#: DE050-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	
01363	Beta BHC	319-85-7	0.080 U	0.080	0.22	1
01363	Gamma BHC - Lindane	58-89-9	0.16 J	0.045	0.22	1
01363	Chlordane	57-74-9	1.1 U	1.1	4.5	1
01363	p,p-DDD	72-54-8	0.088 U	0.088	0.45	1
01363	p,p-DDE	72-55-9	0.85 U	0.85	0.85	1
01363	p,p-DDT	50-29-3	0.78 U	0.78	0.78	1
01363	Delta BHC	319-86-8	2.4 U	2.4	2.4	5
01363	Dieldrin	60-57-1	0.20 U	0.20	0.45	1
01363	Endosulfan I	959-98-8	0.15 U	0.15	0.22	1
01363	Endosulfan II	33213-65-9	0.088 U	0.088	0.45	1
01363	Endosulfan Sulfate	1031-07-8	0.088 U	0.088	0.45	1
01363	Endrin	72-20-8	0.088 U	0.088	0.45	1
01363	Endrin Aldehyde	7421-93-4	0.65 U	0.65	0.65	1
01363	Endrin Ketone	53494-70-5	0.088 U	0.088	0.45	1
01363	Heptachlor	76-44-8	0.32 U	0.080	0.22	1
01363	Heptachlor Epoxide	1024-57-3	0.065 U	0.065	0.22	1
01363	Methoxychlor	72-43-5	8.6 U	8.6	8.6	1
01363	Mirex	2385-85-5	1.7 U	1.7	1.7	1
01363	Toxaphene	8001-35-2	2.9 U	2.9	8.8	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.3 U	1.3	4.4	1
10225	Aroclor 5442	12642-23-8	1.3 U	1.3	4.4	1
10225	Aroclor 5460	11126-42-4	2.1 J	1.3	4.4	1
10225	PCB-1016	12674-11-2	0.44 U	0.44	2.3	1
10225	PCB-1221	11104-28-2	0.66 U	0.66	2.3	1
10225	PCB-1232	11141-16-5	0.69 U	0.69	2.3	1
10225	PCB-1242	53469-21-9	0.66 U	0.66	2.3	1
10225	PCB-1248	12672-29-6	0.44 U	0.44	2.3	1
10225	PCB-1254	11097-69-1	4.2 U	0.44	2.3	1
10225	PCB-1260	11096-82-5	1.3 J	0.44	2.3	1
10225	PCB-1262	37324-23-5	0.44 U	0.44	2.3	1
10225	PCB-1268	11100-14-4	0.44 U	0.44	2.3	1

The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED39 SDG#: DE050-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	9,390	6.54	26.0	1
07914	Boron	7440-42-8	3.97 J	1.16	6.50	1
01650	Calcium	7440-70-2	2,200	7.97	26.0	1
01654	Iron	7439-89-6	15,400	6.12	26.0	1
01656	Lithium	7439-93-2	21.5	0.29	2.6	1
01657	Magnesium	7439-95-4	3,420	3.30	13.0	1
06958	Manganese	7439-96-5	230	0.101	0.650	1
10145	Phosphorus	7723-14-0	357	0.728	13.0	1
01662	Potassium	7440-09-7	3,100	23.4	65.0	1
01667	Sodium	7440-23-5	59.6 J	48.5	130	1
07968	Strontium	7440-24-6	11.1	0.0806	0.650	1
06969	Tin	7440-31-5	2.30 J	1.30	13.0	1
06970	Titanium	7440-32-6	821	0.494	1.30	1
10146	Zirconium	7440-67-7	2.19 J	1.09	6.50	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0773 U	0.0773	0.258	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.51	0.0773	0.515	2
06126	Barium	7440-39-3	106	0.139	0.515	2
06127	Beryllium	7440-41-7	0.513	0.0206	0.129	2
06128	Cadmium	7440-43-9	0.125 J	0.0464	0.129	2
06131	Chromium	7440-47-3	18.3	0.155	0.515	2
06132	Cobalt	7440-48-4	6.80	0.0258	0.129	2
06133	Copper	7440-50-8	7.54	0.0850	0.515	2
06135	Lead	7439-92-1	10.3	0.0134	0.258	2
06138	Molybdenum	7439-98-7	0.364	0.0644	0.129	2
06139	Nickel	7440-02-0	11.6	0.129	0.515	2
06141	Selenium	7782-49-2	0.136 J	0.0515	0.515	2
06142	Silver	7440-22-4	0.0238 J	0.0155	0.129	2
06145	Thallium	7440-28-0	0.268	0.0386	0.129	2
06148	Vanadium	7440-62-2	37.0	0.0283	0.129	2
06149	Zinc	7440-66-6	75.6	0.721	3.86	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0036 U	0.0036	0.125	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3 J	1.1	1.3	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.9 U	11.9	39.8	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.29 J	0.27	1.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED39 SDG#: DE050-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry ASTM D1498						
01821	Oxidation Reduction Potential	n.a.	534	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
			SW-846 9045C modified	Std. Units	Std. Units	Std. Units
00394	22a pH by 9045C	n.a.	7.02	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	24.6	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 06:43	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 15:28	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 19:46	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 12:03	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 12:18	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/12/2011 03:05	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/04/2011 16:25

SED39 SDG#: DE050-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 11:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 11:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 11:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:56	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 11:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 22:28	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 22:49	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/04/11 at 04:25 PM

Group Number: 1226717

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10363SLJ026 Sample number(s): 6172315-6172318, 6172320-6172323									
Acenaphthene	17	U	17.	170	ug/kg	96	76-111		
Acenaphthylene	17	U	17.	170	ug/kg	99	75-122		
Aniline	170		170.	500	ug/kg	79	10-107		
	U								
Anthracene	17	U	17.	170	ug/kg	99	76-112		
Benzidine	1,200		1,200.	3,300	ug/kg	63	15-121		
	U								
Benzo(a)anthracene	17	U	17.	170	ug/kg	100	73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	86	69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	91	61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	82	65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	85	67-125		
Benzoic acid	170		170.	500	ug/kg	108	10-154		
	U								
Benzyl alcohol	170		170.	500	ug/kg	101	68-111		
	U								
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	97	79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	102	75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	99	79-112		
Carbazole	17	U	17.	170	ug/kg	101	77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	99	74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	58	10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	94	70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	94	70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	93	68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	89	67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	101	72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	95	79-110		
Chrysene	17	U	17.	170	ug/kg	100	76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	86	70-128		
Dibenzofuran	17	U	17.	170	ug/kg	97	79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	91	79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	88	70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	89	74-106		
3,3'-Dichlorobenzidine	100		100.	330	ug/kg	77	38-105		
	U								
2,4-Dichlorophenol	17	U	17.	170	ug/kg	98	75-111		
Diethylphthalate	17	U	17.	170	ug/kg	95	76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	100	72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	104	70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	96	77-109		
4,6-Dinitro-2-methylphenol	170		170.	500	ug/kg	93	53-110		
	U								
2,4-Dinitrophenol	670		670.	2,000	ug/kg	85	37-120		
	U								
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	99	73-115		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/04/11 at 04:25 PM

Group Number: 1226717

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	96		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	100		77-111		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	97		75-117		
Fluoranthene	17 U	17.	170	ug/kg	104		78-116		
Fluorene	17 U	17.	170	ug/kg	97		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	98		78-116		
Hexachlorobutadiene	67 U	67.	170	ug/kg	91		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	86		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	87		68-105		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	84		64-119		
Isophorone	17 U	17.	170	ug/kg	95		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	99		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	91		76-105		
2-Methylphenol	33 U	33.	170	ug/kg	98		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	96		66-117		
Naphthalene	17 U	17.	170	ug/kg	94		73-106		
2-Nitroaniline	17 U	17.	170	ug/kg	101		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	99		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	77		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	95		71-104		
2-Nitrophenol	17 U	17.	170	ug/kg	95		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	86		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	94		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	79		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	101		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	90		68-130		
Pentachlorophenol	170 U	170.	500	ug/kg	111*		35-106		
Phenanthrene	17 U	17.	170	ug/kg	99		77-113		
Phenol	17 U	17.	170	ug/kg	99		58-112		
Pyrene	17 U	17.	170	ug/kg	103		75-115		
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	93		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	97		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	97		78-111		
Batch number: 10363SLM026 Sample number(s): 6172315-6172318, 6172320-6172323									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	83		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	86		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	86		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	87		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	85		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	98		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	88		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	87		66-137		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	95		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	93		84-132		
Chrysene	0.33 U	0.33	1.7	ug/kg	87		79-120		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	87		62-142		
Diethylphthalate	6.0 U	6.0	18	ug/kg	94		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	95		70-130		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	95		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	84		78-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	90		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	87		62-141		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	87		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	82		62-120		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/04/11 at 04:25 PM

Group Number: 1226717

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67 U	0.67	1.7	ug/kg	86		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	92		39-148		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	90		55-176		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	87		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	87		56-121		

Batch number: 110040013A	Sample number(s): 6172315-6172318, 6172320-6172323								
2,4-D	1.2 U	1.2	3.6	ug/kg	108		40-140		
Dalapon	4.4 U	4.4	9.0	ug/kg	40		24-89		
2,4-DB	0.62 U	0.62	1.7	ug/kg	95		34-138		
Dicamba	0.40 U	0.40	1.2	ug/kg	94		20-164		
Dinoseb	0.80 U	0.80	2.4	ug/kg	8*		10-36		
2,4-DP (Dichlorprop)	0.80 U	0.80	1.7	ug/kg	111		60-141		
MCPA	76 U	76.	250	ug/kg	94		34-113		
MCPP (Mecoprop)	500	75.	250	ug/kg	88		29-154		
2,4,5-T	0.082 U	0.082	0.17	ug/kg	105		33-145		
2,4,5-TP	0.075 U	0.075	0.17	ug/kg	90		48-138		

Batch number: 103640028A	Sample number(s): 6172315-6172318, 6172320-6172323								
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	82	68*	75-125	18	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	117		72-120		
PCB-1221	0.50 U	0.50	1.7	ug/kg					
PCB-1232	0.52 U	0.52	1.7	ug/kg					
PCB-1242	0.50 U	0.50	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.33 U	0.33	1.7	ug/kg	167*		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					

Batch number: 103640030A	Sample number(s): 6172315-6172318, 6172320-6172323								
Aldrin	0.066 U	0.066	0.17	ug/kg	64		44-135		
Alpha BHC	0.034 U	0.034	0.17	ug/kg	33*		38-130		
Beta BHC	0.060 U	0.060	0.17	ug/kg	66		56-134		
Gamma BHC - Lindane	0.034 U	0.034	0.17	ug/kg	42*		46-127		
Chlordane	0.80 U	0.80	3.4	ug/kg					
p,p-DDD	0.066 U	0.066	0.34	ug/kg	88		60-137		
p,p-DDE	0.066 U	0.066	0.34	ug/kg	118		59-141		
p,p-DDT	0.066 U	0.066	0.34	ug/kg	83		54-130		
Delta BHC	0.036 U	0.036	0.17	ug/kg	72		55-144		
Dieldrin	0.066 U	0.066	0.34	ug/kg	79		65-129		
Endosulfan I	0.044 U	0.044	0.17	ug/kg	64		45-123		
Endosulfan II	0.066 U	0.066	0.34	ug/kg	105		63-127		
Endosulfan Sulfate	0.066 U	0.066	0.34	ug/kg	114		72-138		
Endrin	0.066 U	0.066	0.34	ug/kg	80		62-129		
Endrin Aldehyde	0.066 U	0.066	0.34	ug/kg	79		55-132		
Endrin Ketone	0.066 U	0.066	0.34	ug/kg	106		69-139		
Heptachlor	0.060 U	0.060	0.17	ug/kg	48		43-124		
Heptachlor Epoxide	0.034 U	0.034	0.17	ug/kg	97		65-131		
Methoxychlor	0.34 U	0.34	1.7	ug/kg	83		59-125		
Mirex	0.066 U	0.066	0.34	ug/kg					
Toxaphene	2.2 U	2.2	6.6	ug/kg					

Batch number: 103571026002A	Sample number(s): 6172315-6172323								
Antimony	0.0577 U	0.0577	0.192	mg/kg	63		11-208		
Arsenic	0.0577 U	0.0577	0.385	mg/kg	97		80-120		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/04/11 at 04:25 PM

Group Number: 1226717

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Beryllium	0.0154 U	0.0154	0.0962	mg/kg	98		82-118		
Cadmium	0.0346 U	0.0346	0.0962	mg/kg	99		82-118		
Chromium	0.115 U	0.115	0.385	mg/kg	103		80-120		
Cobalt	0.0192 U	0.0192	0.0962	mg/kg	99		82-118		
Copper	0.203 J	0.0635	0.385	mg/kg	99		80-120		
Lead	0.0114 J	0.0100	0.192	mg/kg	98		80-120		
Nickel	0.121 J	0.0962	0.385	mg/kg	105		80-120		
Silver	0.0115 U	0.0115	0.0962	mg/kg	100		66-134		
Thallium	0.0288 U	0.0288	0.0962	mg/kg	101		81-119		
Vanadium	0.0212 U	0.0212	0.0962	mg/kg	94		90-110		
Zinc	0.601 J	0.538	2.88	mg/kg	101		78-122		
Batch number: 103571026002B	Sample number(s): 6172315-6172323								
Selenium	0.0385 U	0.0385	0.385	mg/kg	97		79-122		
Batch number: 103571026002C	Sample number(s): 6172315-6172323								
Molybdenum	0.0481 U	0.0481	0.0962	mg/kg	103		78-122		
Batch number: 103571026002D	Sample number(s): 6172315-6172323								
Barium	0.104 U	0.104	0.385	mg/kg	106		79-121		
Batch number: 103575708005	Sample number(s): 6172315-6172323								
Aluminum	16.5 J	4.98	19.8	mg/kg	95		61-110		
Boron	0.881 U	0.881	4.95	mg/kg	90		78-110		
Calcium	13.9 J	6.07	19.8	mg/kg	98		88-110		
Iron	6.65 J	4.66	19.8	mg/kg	86		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	100		80-120		
Magnesium	2.51 U	2.51	9.90	mg/kg	97		82-110		
Manganese	0.0772 U	0.0772	0.495	mg/kg	98		81-119		
Phosphorus	1.41 J	0.554	9.90	mg/kg	100		80-120		
Potassium	17.8 U	17.8	49.5	mg/kg	98		78-110		
Sodium	36.9 U	36.9	99.0	mg/kg	98		87-110		
Strontium	0.0782 J	0.0614	0.495	mg/kg	98		79-121		
Tin	1.13 J	0.990	9.90	mg/kg	96		90-114		
Titanium	0.376 U	0.376	0.990	mg/kg	90		80-120		
Zirconium	0.832 U	0.832	4.95	mg/kg	100		80-120		
Batch number: 103575711006	Sample number(s): 6172315-6172323								
Mercury	0.0027 U	0.0027	0.0934	mg/kg	110		88-123		
Batch number: 11013013201A	Sample number(s): 6172315-6172317, 6172319-6172323								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	101		90-110		
Batch number: 11013013203A	Sample number(s): 6172315-6172317, 6172319-6172323								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	87		85-115		
Batch number: 11019243202A	Sample number(s): 6172315-6172317, 6172319-6172323								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	99		80-120		
Batch number: 10361039402B	Sample number(s): 6172315-6172316, 6172319-6172323								
22a pH by 9045C					100		95-105		
Batch number: 10361182102B	Sample number(s): 6172315-6172316, 6172319-6172323								
Oxidation Reduction Potential					100		98-102		
Batch number: 11007162401A	Sample number(s): 6172315-6172323								
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/04/11 at 04:25 PM

Group Number: 1226717

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 10363SLJ026	Sample number(s): 6172315-6172318, 6172320-6172323 UNSPK: 6172316								
Acenaphthene	97	94	75-115	4	30				
Acenaphthylene	100	100	49-126	1	30				
Aniline	75	69	14-114	9	30				
Anthracene	96	96	75-115	0	30				
Benzidine	25*	15*	35-141	53*	30				
Benzo(a)anthracene	97	96	65-122	0	30				
Benzo(a)pyrene	86	84	57-126	2	30				
Benzo(b)fluoranthene	82	87	59-125	6	30				
Benzo(g,h,i)perylene	85	86	59-127	1	30				
Benzo(k)fluoranthene	89	80	56-132	11	30				
Benzoic acid	104	104	10-173	1	30				
Benzyl alcohol	100	96	55-123	4	30				
4-Bromophenyl-phenylether	97	96	67-129	2	30				
Butylbenzylphthalate	101	97	73-134	4	30				
Di-n-butylphthalate	96	96	67-123	1	30				
Carbazole	97	99	64-120	2	30				
4-Chloro-3-methylphenol	95	96	53-130	1	30				
4-Chloroaniline	50	58	23-95	14	30				
bis(2-Chloroethoxy)methane	93	91	54-117	3	30				
bis(2-Chloroethyl)ether	91	89	60-116	3	30				
bis(2-Chloroisopropyl)ether	88	85	55-142	3	30				
2-Chloronaphthalene	81	81	50-141	1	30				
2-Chlorophenol	98	97	73-121	2	30				
4-Chlorophenyl-phenylether	96	92	64-119	4	30				
Chrysene	99	95	62-128	4	30				
Dibenz(a,h)anthracene	85	86	65-125	1	30				
Dibenzofuran	96	96	71-112	0	30				
1,2-Dichlorobenzene	88	81	66-108	8	30				
1,3-Dichlorobenzene	84	78	63-109	8	30				
1,4-Dichlorobenzene	84	79	53-113	7	30				
3,3'-Dichlorobenzidine	82	79	25-123	4	30				
2,4-Dichlorophenol	97	99	78-117	2	30				
Diethylphthalate	94	93	66-118	1	30				
2,4-Dimethylphenol	97	97	56-130	0	30				
3,5-Dimethylphenol	102	101	70-130	1	30				
Dimethylphthalate	96	95	64-118	1	30				
4,6-Dinitro-2-methylphenol	90	90	10-148	0	30				
2,4-Dinitrophenol	83	81	20-143	3	30				
2,4-Dinitrotoluene	96	94	57-114	2	30				
2,6-Dinitrotoluene	96	95	69-123	2	30				
1,2-Diphenylhydrazine	100	98	71-129	2	30				
bis(2-Ethylhexyl)phthalate	96	97	63-122	1	30				
Fluoranthene	99	100	59-122	2	30				
Fluorene	95	95	60-125	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/04/11 at 04:25 PM

Group Number: 1226717

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Hexachlorobenzene	98	95	61-111	4	30				
Hexachlorobutadiene	89	83	62-120	7	30				
Hexachlorocyclopentadiene	79	69	10-153	14	30				
Hexachloroethane	77	72	57-109	7	30				
Indeno(1,2,3-cd)pyrene	85	85	61-126	1	30				
Isophorone	93	92	51-118	0	30				
1-Methylnaphthalene	95	94	73-112	2	30				
2-Methylnaphthalene	89	89	76-114	0	30				
2-Methylphenol	98	96	47-142	2	30				
4-Methylphenol	97	94	55-126	4	30				
Naphthalene	93	91	72-116	2	30				
2-Nitroaniline	98	99	67-125	1	30				
3-Nitroaniline	94	93	59-122	1	30				
4-Nitroaniline	79	80	52-112	2	30				
Nitrobenzene	92	90	51-114	2	30				
2-Nitrophenol	94	95	74-115	2	30				
4-Nitrophenol	88	83	39-133	6	30				
N-Nitroso-di-n-propylamine	91	90	60-116	1	30				
N-Nitrosodimethylamine	87	79	47-116	9	30				
N-Nitrosodiphenylamine	98	97	86-145	1	30				
Di-n-octylphthalate	94	91	56-126	3	30				
Pentachlorophenol	108	114	17-149	5	30				
Phenanthrene	95	95	65-125	1	30				
Phenol	98	96	58-126	2	30				
Pyrene	100	97	51-151	3	30				
1,2,4-Trichlorobenzene	90	89	72-115	1	30				
2,4,5-Trichlorophenol	97	97	34-139	1	30				
2,4,6-Trichlorophenol	100	98	49-140	2	30				
Batch number: 10363SLM026 Sample number(s): 6172315-6172318, 6172320-6172323 UNSPK: 6172316									
Acenaphthene	92	91	63-105	2	30				
Acenaphthylene	95	93	55-126	2	30				
Anthracene	93	93	46-136	0	30				
Benzo(a)anthracene	100	97	39-144	3	30				
Benzo(a)pyrene	97	95	34-156	2	30				
Benzo(b)fluoranthene	104	108	43-155	4	30				
Benzo(g,h,i)perylene	30*	34	33-141	13	30				
Benzo(k)fluoranthene	122	130	42-144	6	30				
Butylbenzylphthalate	171*	138	73-140	21	30				
Di-n-butylphthalate	112	112	78-160	0	30				
Chrysene	91	89	29-156	3	30				
Dibenz(a,h)anthracene	47	46	41-130	2	30				
Diethylphthalate	105	102	87-131	3	30				
Dimethylphthalate	105	102	74-118	3	30				
Bis(2-Ethylhexyl)phthalate	125	125	39-167	0	30				
Fluoranthene	100	94	26-166	6	30				
Fluorene	95	94	45-121	1	30				
Indeno(1,2,3-cd)pyrene	44	42	21-143	3	30				
1-Methylnaphthalene	90	95	72-123	5	30				
2-Methylnaphthalene	83	87	28-121	5	30				
Naphthalene	104*	95	61-102	9	30				
N-Nitrosodimethylamine	108	99	48-113	8	30				
Di-n-octylphthalate	246*	242*	40-192	2	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/04/11 at 04:25 PM

Group Number: 1226717

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Phenanthrene	90	91	12-165	1	30				
Pyrene	123	100	15-153	20	30				
Batch number: 110040013A Sample number(s): 6172315-6172318,6172320-6172323 UNSPK: 6172316									
2,4-D	105	99	28-161	6	35				
Dalapon	57	103*	12-86	57*	50				
2,4-DB	157	136	20-170	14	50				
Dicamba	72	75	33-120	3	50				
Dinoseb	10	10	1-44	2	35				
2,4-DP (Dichlorprop)	138	113	55-141	20	50				
MCPA	91	129	31-184	34	50				
MCPP (Mecoprop)	38	27	16-174	33	50				
2,4,5-T	60	65	25-132	8	35				
2,4,5-TP	83	93	10-183	11	35				
Batch number: 103640028A Sample number(s): 6172315-6172318,6172320-6172323 UNSPK: 6172316									
PCB-1016	116	123	29-146	5	50				
PCB-1260	147	152*	39-149	3	50				
Batch number: 103640030A Sample number(s): 6172315-6172318,6172320-6172323 UNSPK: 6172316									
Aldrin	103	118	16-126	14	50				
Alpha BHC	91	76	10-129	18	50				
Beta BHC	56	50	14-147	12	50				
Gamma BHC - Lindane	91	88	10-140	3	50				
p,p-DDD	85	97	16-163	13	50				
p,p-DDE	171*	202*	18-161	17	50				
p,p-DDT	143	182*	10-176	24	50				
Delta BHC	119	94	23-140	24	50				
Dieldrin	76	97	19-154	25	50				
Endosulfan I	79	91	16-137	14	50				
Endosulfan II	103	106	28-154	3	50				
Endosulfan Sulfate	131	131	21-160	0	50				
Endrin	92	95	11-149	3	50				
Endrin Aldehyde	65	67	10-148	2	35				
Endrin Ketone	102	106	22-165	4	50				
Heptachlor	76	88	13-126	15	50				
Heptachlor Epoxide	100	124	13-157	22	50				
Methoxychlor	83	127	32-147	42	50				
Batch number: 103571026002A Sample number(s): 6172315-6172323 UNSPK: 6172316 BKG: 6172316									
Antimony	37*	45*	75-125	14	20	0.0932 J	0.0866 J	7 (1)	20
Arsenic	151*	199*	75-125	11	20	5.16	5.63	9	20
Beryllium	111	111	75-125	1	20	0.480	0.449	7 (1)	20
Cadmium	142*	135*	75-125	5	20	0.194	0.180	8 (1)	20
Chromium	150*	166*	75-125	4	20	17.0	16.9	1	20
Cobalt	118	122	75-125	2	20	4.92	5.20	5	20
Copper	126*	132*	75-125	2	20	7.26	7.63	5	20
Lead	164*	179*	75-125	3	20	8.38	8.14	3	20
Nickel	143*	143*	75-125	1	20	10.1	10.7	5	20
Silver	121	121	75-125	0	20	0.0239 J	0.0312 J	27* (1)	20
Thallium	123	124	75-125	0	20	0.247	0.260	5 (1)	20
Vanadium	185*	203*	75-125	3	20	35.5	35.5	0	20
Zinc	226 (2)	210 (2)	75-125	2	20	59.3	61.8	4	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/04/11 at 04:25 PM

Group Number: 1226717

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103571026002B Selenium	Sample number(s): 6172315-6172323 105	109	75-125	3	20	UNSPK: 6172316 0.128 J	BKG: 6172316 0.132 J	3 (1)	20
Batch number: 103571026002C Molybdenum	Sample number(s): 6172315-6172323 139*	140*	75-125	0	20	UNSPK: 6172316 0.382	BKG: 6172316 0.391	2 (1)	20
Batch number: 103571026002D Barium	Sample number(s): 6172315-6172323 306 (2)	253 (2)	75-125	5	20	UNSPK: 6172316 86.9	BKG: 6172316 85.9	1	20
Batch number: 103575708005 Aluminum	Sample number(s): 6172315-6172323 726 (2)	535 (2)	75-125	3	20	UNSPK: 6172316 12,200	BKG: 6172316 11,600	5	20
Boron	94	92	84-115	2	20	3.89 J	3.90 J	0 (1)	20
Calcium	153 (2)	145 (2)	75-125	1	20	2,460	2,400	2	20
Iron	-881 (2)	-1536 (2)	75-125	4	20	18,500	16,900	9	20
Lithium	97	93	82-114	3	20	24.4	22.3	9	20
Magnesium	-20 (2)	-81 (2)	75-125	2	20	5,230	4,770	9	20
Manganese	49 (2)	40 (2)	75-125	1	20	277	251	10	20
Phosphorus	82 (2)	81 (2)	75-125	0	20	419	406	3	20
Potassium	95	89	75-125	1	20	3,290	3,050	8	20
Sodium	102	99	75-125	3	20	62.6 J	59.3 J	6 (1)	20
Strontium	97	94	75-115	2	20	11.4	11.8	4	20
Tin	88	86	80-110	2	20	1.76 J	1.64 J	7 (1)	20
Titanium	186 (2)	192 (2)	75-125	0	20	1,130	1,080	5	20
Zirconium	93	91	75-125	2	20	3.69 J	3.70 J	0 (1)	20
Batch number: 103575711006 Mercury	Sample number(s): 6172315-6172323 103	102	65-135	6	20	UNSPK: 6172316 0.0027 U	BKG: 6172316 0.0028 U	0 (1)	20
Batch number: 11013013201A 11a Anions by 300.0 - Fluoride	Sample number(s): 6172315-6172317, 6172319-6172323 81		80-120			UNSPK: 6172316 0.89 J	BKG: 6172316 0.81 J	10 (1)	20
Batch number: 11013013203A 7a Perchlorate EPA 314.0	Sample number(s): 6172315-6172317, 6172319-6172323 84		80-120			UNSPK: 6172316 9.0 U	BKG: 6172316 9.0 U	0 (1)	15
Batch number: 11019243202A 3a Cr VI by EPA 7199	Sample number(s): 6172315-6172317, 6172319-6172323 82		75-125			UNSPK: 6172316 0.21 J	BKG: 6172316 0.45 J	73* (1)	20
Batch number: 10361039402B 22a pH by 9045C	Sample number(s): 6172315-6172316, 6172319-6172323 6.51					BKG: 6172316 6.46		1	1
Batch number: 10361182102B Oxidation Reduction Potential	Sample number(s): 6172315-6172316, 6172319-6172323 536					BKG: 6172316 541		1	6
Batch number: 11007162401A 28a Moisture Content by 160.3	Sample number(s): 6172315-6172323 16.4					BKG: 6172316 15.5		5	20
28a Moisture Content by 160.3	16.4					15.5		5	20
28a Moisture Content by 160.3	16.4					15.5		5	20

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/04/11 at 04:25 PM

Group Number: 1226717

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 10363SLJ026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6172315	92	93	95	88	88	80
6172316	91	93	94	87	89	86
6172317	97	97	98	90	92	88
6172318	93	93	95	89	89	86
6172320	92	93	93	88	88	86
6172321	91	92	91	87	88	82
6172322	88	88	92	85	86	77
6172323	91	90	95	86	87	81
Blank	88	90	91	89	90	86
LCS	95	95	99	90	90	89
MS	97	97	98	90	92	88
MSD	93	93	95	89	89	86
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM

Batch number: 10363SLM026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6172315	99	90	83
6172316	94	86	130
6172317	96	93	127
6172318	100	89	104
6172320	95	90	80
6172321	93	85	81
6172322	89	83	98
6172323	89	85	78
Blank	91	90	88
LCS	90	85	84
MS	96	93	127
MSD	100	89	104
Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 103640028A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6172315	102	130*
6172316	94	124*
6172317	105	132*
6172318	108	134*
6172320	99	129*
6172321	110	141*
6172322	103	104
6172323	172*	205*
Blank	114	135*
LCS	111	137*
LCS D	83	109
MS	105	132*

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/04/11 at 04:25 PM

Group Number: 1226717

Surrogate Quality Control

MSD 108 134*

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 103640030A

Tetrachloro-m-xylene

Decachlorobiphenyl

6172315	46*	34
6172316	67	71
6172317	61	70
6172318	88	75
6172320	63	62
6172321	56	149*
6172322	83	65
6172323	60	31
Blank	32*	102
LCS	29*	99
MS	61	70
MSD	88	75

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 110040013A

2,4-Dichlorophenylacetic
acid

6172315	74
6172316	83
6172317	95
6172318	94
6172320	89
6172321	78
6172322	71
6172323	37
Blank	103
LCS	94
MS	95
MSD	94

Limits: 36-156

*- Outside of specification

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13013

1226717

6172315-23

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD																		Other Instructions and Notes								
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260B	SVOCs EPA 8270C & PAHs EPA 8270 SIM	TPH-EPA 8015B	**TPH-EPI EPA 8015B Mod.	Metals EPA 8210/6020/8270/721A	**Hex Chrome EPA 7199*	**Merck EPA 300.0	**PCBs EPA 8082	**Dioxin/Furan EPA 1631B	**Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 815P	**Pesticides EPA 8081A (surface soil only)	**Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**HMDHA EPA 1625C	**Organics EPA 8330A		**Cyanide EPA 9011B	**Pb EPA 9045C	**Temphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B			
DUP02-SIV-QC-122110	12.21.10	0952	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												SEDIMENT DUP	
DUP15-SASB-QC-122110	12.21.10	1052	soil	none	2 16 oz. jars			X			X	X	X	X	X	X															SUBSURFACE DUP	
DUP15-SASB-QC-122110	12.21.10	1052	soil	none	4 Encore Samplers	X	X																								SUBSURFACE DUP	
EB07-SASB-122110	12.21.10	1212	water	none	6-1 liter ambers			X						X	X			X	X												surface tool rinse	
EB07-SASB-122110	12.21.10	1212	water	none	1-500 ml poly						X	X				X															surface tool rinse	
EB07-SASB-122110	12.21.10	1212	water	HNO3	1-500 ml poly						X																				surface tool rinse	
EB07-SASB-122110	12.21.10	1212	water	HCl	5 40 mL VOA vials				X																				X		surface tool rinse	
EB07-SASB-122110	12.21.10	1212	water	none	4 40 mL VOA vials														X									X			surface tool rinse	
EB07-SASB-122110	12.21.10	1212	water	none	4 1L ambers					X												X	X			X					surface tool rinse	
EB07-SASB-122110	12.21.10	1212	water	none	1 250 mL glass bottle															X											surface tool rinse	
EB07-SASB-122110	12.21.10	1212	water	NaOH	1 500 mL poly																			X							surface tool rinse	
SED-002-SIV-SD-0.0-0.5	12.21.10	0950	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SED-015-SIV-SD-0.0-0.5	12.21.10	1305	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SED-036-SIV-SD-0.0-0.5	12.21.10	1145	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SED-038-SIV-SD-0.0-0.5	12.21.10	1515	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SED-039-SIV-SD-0.0-0.5	12.21.10	1055	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-006-SASB-SB-4.0-5.0	12.21.10	1529	soil	none	4 16 oz jars			X			X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X		
SL-006-SASB-SB-4.5	12.21.10	1525	soil	none	5 Encore Samplers	X	X		X																							
SL-006-SASB-SB-5.0-6.0	12.21.10	1539	soil	none	4 16 oz jars			X			X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X		sample appears to be red concrete
SL-006-SASB-SB-5.5	12.21.10	1535	soil	none	5 Encore Samplers	X	X		X																							sample appears to be red
SL-046-SASB-SB-4.0-5.0MS	12.21.10	1047	soil	none	6 16 oz. jars			X			X	X	X	X	X	X																subsurface MS/MSD
SL-046-SASB-SB-4.5MS	12.21.10	1041	soil	none	12 Encore Samplers	X	X																									subsurface MS/MSD
SL-046-SASB-SB-9.0-10.0	12.21.10	1054	soil	none	2 16 oz. jars			X			X	X	X	X	X	X																
SL-047-SASB-SB-4.0-5.0	12.21.10	1254	soil	none	2 16 oz. jars			X			X	X	X	X	X	X																
SL-047-SASB-SB-4.5	12.21.10	1250	soil	none	4 Encore Samplers	X	X																									
SL-159-SASB-SS-0.0-0.5	12.21.10	1037	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-183-SASB-SS-0.0-0.5	12.21.10	1025	soil	none	2 x 16 oz. jars & 1 6" sleeve			X			X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		
SL-183-SASB-SS-0.0-0.5	12.21.10	1025	soil	none	5 Encore Samplers	X	X		X																							
SL-219-SASB-SS-0.0-0.5	12.21.10	0859	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-225-SASB-SS-0.0-0.5	12.21.10	0935	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-226-SASB-SS-0.0-0.5	12.21.10	0950	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
SL-227-SASB-SS-0.0-0.5	12.21.10	0938	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X													
TB-122110	12.21.10	1212	water	HCl	4-40 mL clear VOA vials	X	X		X																							trip blank
Requested by: (Signature) <i>[Signature]</i> Date/Time 12/22/10 10:56 Requested for Laboratory by: (Signature) <i>[Signature]</i> Received by: (Signature) <i>[Signature]</i> Date/Time Tracking Numbers 8695 1431 7903, ...7914, ...7925, ...7936						Laboratory: Lancaster Laboratories, Inc. No. of coolers = 4																										

SED-002-SIV-SD-0.0-0.5 was a QC sample per
PB on 12/22/10. NLM 12/30/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 05, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/22/2010

Group Number: 1226722

SDG: DX033

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample DescriptionDUP02-SIV-QC-122110 Soil
SED-002-SIV-SD-0.0-0.5 Sediment
SED-002-SIV-SD-0.0-0.5MS Sediment
SED-002-SIV-SD-0.0-0.5MSD Sediment
SED-015-SIV-SD-0.0-0.5 Sediment
SED-036-SIV-SD-0.0-0.5 Sediment
SED-038-SIV-SD-0.0-0.5 Sediment
SED-039-SIV-SD-0.0-0.5 SedimentLancaster Labs (LLI) #6172362
6172363
6172364
6172365
6172366
6172367
6172368
6172369

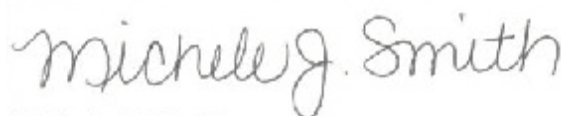
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

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Page 1 of 4

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172362
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DDP02 SDG#: DX033-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	15.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172362
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DDP02 SDG#: DX033-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0378 U	0.0378	1.19	1
11031	12378-PeCDD	40321-76-4	0.0676 JBQ	0.0382	5.95	1
11031	123478-HxCDD	39227-28-6	0.0497 JB	0.0383	5.95	1
11031	123678-HxCDD	57653-85-7	0.183 JBQ	0.0385	5.95	1
11031	123789-HxCDD	19408-74-3	0.190 JB	0.0382	5.95	1
11031	1234678-HpCDD	35822-46-9	2.04 JBQ	0.0419	5.95	1
11031	OCDD	3268-87-9	14.7 B	0.0375	11.9	1
11031	2378-TCDF	51207-31-9	0.176 JQ	0.0565	1.19	1
11031	12378-PeCDF	57117-41-6	0.177 JBQ	0.0270	5.95	1
11031	23478-PeCDF	57117-31-4	0.314 JBQ	0.0268	5.95	1
11031	123478-HxCDF	70648-26-9	0.0820 JBQ	0.0270	5.95	1
11031	123678-HxCDF	57117-44-9	0.117 JBQ	0.0237	5.95	1
11031	123789-HxCDF	72918-21-9	0.100 JB	0.0285	5.95	1
11031	234678-HxCDF	60851-34-5	0.138 JB	0.0250	5.95	1
11031	1234678-HpCDF	67562-39-4	0.494 JB	0.0197	5.95	1
11031	1234789-HpCDF	55673-89-7	0.0821 JBQ	0.0283	5.95	1
11031	OCDF	39001-02-0	0.904 JB	0.0465	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	70	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172362
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DDP02 SDG#: DX033-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172362
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DDP02 SDG#: DX033-01FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 07:13	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172363
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172363
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0480 U	0.0480	1.20	1
11031	12378-PeCDD	40321-76-4	0.0842 JBQ	0.0465	5.98	1
11031	123478-HxCDD	39227-28-6	0.0793 JBQ	0.0421	5.98	1
11031	123678-HxCDD	57653-85-7	0.149 JBQ	0.0432	5.98	1
11031	123789-HxCDD	19408-74-3	0.203 JB	0.0422	5.98	1
11031	1234678-HpCDD	35822-46-9	2.08 JB	0.0438	5.98	1
11031	OCDD	3268-87-9	13.8 B	0.0410	12.0	1
11031	2378-TCDF	51207-31-9	0.112 JQ	0.0642	1.20	1
11031	12378-PeCDF	57117-41-6	0.201 JB	0.0301	5.98	1
11031	23478-PeCDF	57117-31-4	0.304 JB	0.0300	5.98	1
11031	123478-HxCDF	70648-26-9	0.0899 JBQ	0.0312	5.98	1
11031	123678-HxCDF	57117-44-9	0.0958 JBQ	0.0279	5.98	1
11031	123789-HxCDF	72918-21-9	0.112 JBQ	0.0348	5.98	1
11031	234678-HxCDF	60851-34-5	0.110 JB	0.0306	5.98	1
11031	1234678-HpCDF	67562-39-4	0.578 JB	0.0245	5.98	1
11031	1234789-HpCDF	55673-89-7	0.0704 JB	0.0337	5.98	1
11031	OCDF	39001-02-0	1.09 JBQ	0.0444	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	72	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172363
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172363
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 08:10	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172364
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172364
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	25.2	0.0604	1.20	1
11031	12378-PeCDD	40321-76-4	128	0.0658	5.98	1
11031	123478-HxCDD	39227-28-6	127	0.0614	5.98	1
11031	123678-HxCDD	57653-85-7	126	0.0633	5.98	1
11031	123789-HxCDD	19408-74-3	124	0.0608	5.98	1
11031	1234678-HpCDD	35822-46-9	127	0.0585	5.98	1
11031	OCDD	3268-87-9	260	0.0486	12.0	1
11031	2378-TCDF	51207-31-9	26.8	0.0843	1.20	1
11031	12378-PeCDF	57117-41-6	125	0.0377	5.98	1
11031	23478-PeCDF	57117-31-4	127	0.0390	5.98	1
11031	123478-HxCDF	70648-26-9	122	0.0605	5.98	1
11031	123678-HxCDF	57117-44-9	121	0.0522	5.98	1
11031	123789-HxCDF	72918-21-9	122	0.0669	5.98	1
11031	234678-HxCDF	60851-34-5	121	0.0572	5.98	1
11031	1234678-HpCDF	67562-39-4	122	0.0450	5.98	1
11031	1234789-HpCDF	55673-89-7	122	0.0651	5.98	1
11031	OCDF	39001-02-0	247	0.0598	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	71	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172364
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172364
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 09:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172365
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172365
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	25.5	0.0565	1.20	1
11031	12378-PeCDD	40321-76-4	129 B	0.0532	5.98	1
11031	123478-HxCDD	39227-28-6	126 B	0.0530	5.98	1
11031	123678-HxCDD	57653-85-7	126 B	0.0555	5.98	1
11031	123789-HxCDD	19408-74-3	122 B	0.0538	5.98	1
11031	1234678-HpCDD	35822-46-9	126 B	0.0620	5.98	1
11031	OCDD	3268-87-9	261 B	0.0452	12.0	1
11031	2378-TCDF	51207-31-9	27.2	0.0795	1.20	1
11031	12378-PeCDF	57117-41-6	125 B	0.0425	5.98	1
11031	23478-PeCDF	57117-31-4	124 B	0.0415	5.98	1
11031	123478-HxCDF	70648-26-9	121 B	0.102	5.98	1
11031	123678-HxCDF	57117-44-9	121 B	0.0911	5.98	1
11031	123789-HxCDF	72918-21-9	120 B	0.110	5.98	1
11031	234678-HxCDF	60851-34-5	123 B	0.0989	5.98	1
11031	1234678-HpCDF	67562-39-4	121 B	0.0498	5.98	1
11031	1234789-HpCDF	55673-89-7	123 B	0.0669	5.98	1
11031	OCDF	39001-02-0	247 B	0.0548	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	70	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172365
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD002 SDG#: DX033-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172365
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/22/2010 10:55

Suite 210

Reported: 02/05/2011 15:00

Chantilly VA 20151

DD002 SDG#: DX033-02MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 10:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172366
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD015 SDG#: DX033-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	23.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172366
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD015 SDG#: DX033-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0569 U	0.0569	1.30	1
11031	12378-PeCDD	40321-76-4	0.419 JB	0.0572	6.51	1
11031	123478-HxCDD	39227-28-6	0.281 JB	0.0583	6.51	1
11031	123678-HxCDD	57653-85-7	0.511 JB	0.0613	6.51	1
11031	123789-HxCDD	19408-74-3	0.524 JB	0.0598	6.51	1
11031	1234678-HpCDD	35822-46-9	5.17 JB	0.0577	6.51	1
11031	OCDD	3268-87-9	65.2 B	0.0473	13.0	1
11031	2378-TCDF	51207-31-9	0.349 JQ	0.0932	1.30	1
11031	12378-PeCDF	57117-41-6	0.452 JB	0.0400	6.51	1
11031	23478-PeCDF	57117-31-4	0.787 JB	0.0387	6.51	1
11031	123478-HxCDF	70648-26-9	0.334 JB	0.0461	6.51	1
11031	123678-HxCDF	57117-44-9	0.373 JB	0.0422	6.51	1
11031	123789-HxCDF	72918-21-9	0.331 JB	0.0521	6.51	1
11031	234678-HxCDF	60851-34-5	0.510 JB	0.0465	6.51	1
11031	1234678-HpCDF	67562-39-4	1.12 JB	0.0329	6.51	1
11031	1234789-HpCDF	55673-89-7	0.314 JBQ	0.0447	6.51	1
11031	OCDF	39001-02-0	2.04 JB	0.0478	13.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172366
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD015 SDG#: DX033-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172366
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD015 SDG#: DX033-03

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was
6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality
Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 11:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172367
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD036 SDG#: DX033-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	20.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172367
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD036 SDG#: DX033-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0521 U	0.0521	1.26	1
11031	12378-PeCDD	40321-76-4	0.112 JBQ	0.0473	6.32	1
11031	123478-HxCDD	39227-28-6	0.0608 JB	0.0402	6.32	1
11031	123678-HxCDD	57653-85-7	0.106 JBQ	0.0431	6.32	1
11031	123789-HxCDD	19408-74-3	0.0675 JB	0.0407	6.32	1
11031	1234678-HpCDD	35822-46-9	1.22 JB	0.0513	6.32	1
11031	OCDD	3268-87-9	6.76 JB	0.0416	12.6	1
11031	2378-TCDF	51207-31-9	0.175 JQ	0.0689	1.26	1
11031	12378-PeCDF	57117-41-6	0.148 JBQ	0.0298	6.32	1
11031	23478-PeCDF	57117-31-4	0.299 JBQ	0.0287	6.32	1
11031	123478-HxCDF	70648-26-9	0.0784 JBQ	0.0281	6.32	1
11031	123678-HxCDF	57117-44-9	0.0969 JB	0.0244	6.32	1
11031	123789-HxCDF	72918-21-9	0.0759 JB	0.0288	6.32	1
11031	234678-HxCDF	60851-34-5	0.131 JB	0.0260	6.32	1
11031	1234678-HpCDF	67562-39-4	0.321 JBQ	0.0198	6.32	1
11031	1234789-HpCDF	55673-89-7	0.0505 JBQ	0.0263	6.32	1
11031	OCDF	39001-02-0	0.491 JB	0.0539	12.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172367
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD036 SDG#: DX033-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172367
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD036 SDG#: DX033-04

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was
6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality
Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 11:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172368
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD038 SDG#: DX033-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172368
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD038 SDG#: DX033-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.145	JQ 0.111	1.14	1
11031	12378-PeCDD	40321-76-4	1.51	JB 0.180	5.72	1
11031	123478-HxCDD	39227-28-6	2.89	JB 0.126	5.72	1
11031	123678-HxCDD	57653-85-7	12.1	B 0.131	5.72	1
11031	123789-HxCDD	19408-74-3	6.93	B 0.131	5.72	1
11031	1234678-HpCDD	35822-46-9	262	B 0.205	5.72	1
11031	OCDD	3268-87-9	1,750	B 0.163	11.4	1
11031	2378-TCDF	51207-31-9	0.217	JQ 0.125	1.14	1
11031	12378-PeCDF	57117-41-6	0.274	JB 0.0673	5.72	1
11031	23478-PeCDF	57117-31-4	0.598	JB 0.0695	5.72	1
11031	123478-HxCDF	70648-26-9	0.670	JB 0.113	5.72	1
11031	123678-HxCDF	57117-44-9	0.665	JB 0.0992	5.72	1
11031	123789-HxCDF	72918-21-9	0.358	JB 0.126	5.72	1
11031	234678-HxCDF	60851-34-5	1.07	JB 0.108	5.72	1
11031	1234678-HpCDF	67562-39-4	17.5	B 0.0807	5.72	1
11031	1234789-HpCDF	55673-89-7	2.10	JB 0.115	5.72	1
11031	OCDF	39001-02-0	43.7	B 0.109	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	79	17 - 157
13C12-1278-TCDD (CRS)	72	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172368
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD038 SDG#: DX033-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172368
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD038 SDG#: DX033-05

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was
6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality
Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 12:54	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172369
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD039 SDG#: DX033-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	24.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172369
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD039 SDG#: DX033-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0634 U	0.0634	1.33	1
11031	12378-PeCDD	40321-76-4	0.223 JBQ	0.0637	6.63	1
11031	123478-HxCDD	39227-28-6	0.114 JBQ	0.0493	6.63	1
11031	123678-HxCDD	57653-85-7	0.257 JBQ	0.0513	6.63	1
11031	123789-HxCDD	19408-74-3	0.217 JBQ	0.0475	6.63	1
11031	1234678-HpCDD	35822-46-9	2.51 JB	0.0649	6.63	1
11031	OCDD	3268-87-9	18.1 B	0.0489	13.3	1
11031	2378-TCDF	51207-31-9	0.172 JQ	0.0889	1.33	1
11031	12378-PeCDF	57117-41-6	0.175 JB	0.0381	6.63	1
11031	23478-PeCDF	57117-31-4	0.353 JBQ	0.0365	6.63	1
11031	123478-HxCDF	70648-26-9	0.150 JB	0.0390	6.63	1
11031	123678-HxCDF	57117-44-9	0.108 JB	0.0332	6.63	1
11031	123789-HxCDF	72918-21-9	0.0824 JBQ	0.0434	6.63	1
11031	234678-HxCDF	60851-34-5	0.107 JB	0.0359	6.63	1
11031	1234678-HpCDF	67562-39-4	0.459 JB	0.0282	6.63	1
11031	1234789-HpCDF	55673-89-7	0.0903 JB	0.0443	6.63	1
11031	OCDF	39001-02-0	0.901 JBQ	0.0650	13.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	94	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	101	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	79	17 - 157
13C12-1278-TCDD (CRS)	99	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172369
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD039 SDG#: DX033-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172369
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/22/2010 10:55

Reported: 02/05/2011 15:00

DD039 SDG#: DX033-06*

General Sample Comments

State of California Lab Certification No. 2501

The temperature of the sample bottle(s) upon receipt at the lab was
6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality
Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 13:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/05/11 at 03:00 PM

Group Number: 1226722

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11007162401A 28a Moisture Content by 160.3	Sample number(s): 6172362-6172369				100		80-120		

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11017001	Sample number(s): 6172362-6172369								
2378-TCDD	0.0282 U	0.0282	1.00	ng/kg	106		67-158		
12378-PeCDD	0.0434 J	0.0279	5.00	ng/kg	106		70-142		
123478-HxCDD	0.0203 J	0.0200	5.00	ng/kg	102		70-164		
123678-HxCDD	0.0286 J	0.0203	5.00	ng/kg	104		76-134		
123789-HxCDD	0.0508 J	0.0200	5.00	ng/kg	100		64-162		
1234678-HpCDD	0.179 J	0.0317	5.00	ng/kg	102		70-140		
OCDD	0.535 J	0.0277	10.0	ng/kg	101		78-144		
2378-TCDF	0.0334 U	0.0334	1.00	ng/kg	112		75-158		
12378-PeCDF	0.0412 J	0.0165	5.00	ng/kg	104		80-134		
23478-PeCDF	0.0797 J	0.0152	5.00	ng/kg	104		68-160		
123478-HxCDF	0.0517 J	0.0151	5.00	ng/kg	100		72-134		
123678-HxCDF	0.0385 J	0.0134	5.00	ng/kg	99		84-130		
123789-HxCDF	0.0382 J	0.0162	5.00	ng/kg	100		78-130		
234678-HxCDF	0.0441 J	0.0145	5.00	ng/kg	103		70-156		
1234678-HpCDF	0.0827 J	0.0108	5.00	ng/kg	100		82-122		
1234789-HpCDF	0.0521 J	0.0149	5.00	ng/kg	101		78-138		
OCDF	0.232 J	0.0346	10.0	ng/kg	102		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11007162401A 28a Moisture Content by 160.3	Sample number(s): 6172362-6172369					BKG: P172316 16.4	15.5	5	20
Batch number: 11017001	Sample number(s): 6172362-6172369					UNSPK: 6172363			
2378-TCDD	105	107	67-158	1	25				
12378-PeCDD	107	108	70-142	1	25				
123478-HxCDD	106	105	70-164	1	25				
123678-HxCDD	105	105	76-134	0	25				
123789-HxCDD	104	102	64-162	2	25				
1234678-HpCDD	105	104	70-140	1	25				
OCDD	103	103	78-144	0	25				

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/05/11 at 03:00 PM

Group Number: 1226722

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDF	111	113	75-158	1	25				
12378-PeCDF	104	104	80-134	0	25				
23478-PeCDF	106	104	68-160	2	25				
123478-HxCDF	102	101	72-134	1	25				
123678-HxCDF	101	101	84-130	1	25				
123789-HxCDF	102	101	78-130	2	25				
234678-HxCDF	101	103	70-156	1	25				
1234678-HpCDF	101	101	82-122	0	25				
1234789-HpCDF	102	103	78-138	1	25				
OCDF	103	103	63-170	0	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11017001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6172362	68	79	72	78	73	77
6172363	61	74	66	72	67	71
6172364	66	79	69	78	72	75
6172365	65	78	69	75	70	73
6172366	70	83	72	79	73	77
6172367	65	78	68	74	71	78
6172368	59	63	63	71	65	65
6172369	80	87	79	90	81	82
Blank	81	89	80	90	83	88
MS	66	79	69	78	72	75
MSD	65	78	69	75	70	73
OPR	65	76	66	74	68	70
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6172362	85	74	70	83	81	76
6172363	76	71	67	72	74	70
6172364	85	74	71	80	80	75
6172365	81	72	70	77	78	74
6172366	84	78	75	86	83	78
6172367	81	76	73	78	78	74
6172368	80	73	79	72	64	69
6172369	104	82	79	99	94	86
Blank	97	89	87	97	88	88
MS	85	74	71	80	80	75
MSD	81	72	70	77	78	74
OPR	84	66	60	81	78	76

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/05/11 at 03:00 PM

Group Number: 1226722

Surrogate Quality Control

Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6172362	79	77	83	82	72	86
6172363	69	71	76	76	65	76
6172364	75	76	82	81	70	84
6172365	73	74	79	78	68	81
6172366	77	78	84	83	74	87
6172367	73	74	80	79	68	81
6172368	70	68	80	94	61	69
6172369	86	87	96	95	82	101
Blank	88	89	98	98	80	93
MS	75	76	82	81	70	84
MSD	73	74	79	78	68	81
OPR	73	75	81	80	66	81
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

13013

1226722

6172362-69

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD																		Other Instructions and Notes				
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hexachrome analysis, lab will measure pH and ORP						1. VOCs EPA 8160B	1.4-Chloro EPA 8260A	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	**TPH-EFH EPA 8015B Mod.	*Mercury EPA 8010/8020/8047/1A	*Hex Chlorine EPA 7155*	*Fluoride EPA 300.0	*PCBs EPA 8082	*Bislin/Puran EPA 1513B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 8850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8255 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8215A	**p-NDMA EPA 1515C	**Isopropyl EPA 8215A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																							
DUP02-SIV-QC-122110	12.21.10	0952	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
DUP15-SASB-QC-122110	12.21.10	1052	soil	none	2 16 oz. jars			X			X	X	X	X	X													
DUP15-SASB-QC-122110	12.21.10	1052	soil	none	4 Encore Samplers	X	X																					
EB07-SASB-122110	12.21.10	1212	water	none	6-1 liter ambers			X						X	X		X	X										
EB07-SASB-122110	12.21.10	1212	water	none	1-500 ml poly							X	X		X													
EB07-SASB-122110	12.21.10	1212	water	HNO3	1-500 ml poly						X																	
EB07-SASB-122110	12.21.10	1212	water	HCl	5 40-mL VOA vials				X																	X		
EB07-SASB-122110	12.21.10	1212	water	none	4 40 mL VOA vials														X							X		
EB07-SASB-122110	12.21.10	1212	water	none	4 1L ambers					X										X	X			X				
EB07-SASB-122110	12.21.10	1212	water	none	1 250 mL glass bottle														X									
EB07-SASB-122110	12.21.10	1212	water	NaOH	1 500 mL poly																	X						
SED-002-SIV-SD-0.0-0.5 MS	12.21.10	0950	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
SED-015-SIV-SD-0.0-0.5	12.21.10	1305	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
SED-036-SIV-SD-0.0-0.5	12.21.10	1145	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
SED-038-SIV-SD-0.0-0.5	12.21.10	1515	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
SED-039-SIV-SD-0.0-0.5	12.21.10	1055	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
SL-006-SASB-SB-4.0-5.0	12.21.10	1529	soil	none	4 16 oz jars			X		X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-006-SASB-SB-4.5	12.21.10	1525	soil	none	5 Encore Samplers	X	X	X																				
SL-006-SASB-SB-5.0-6.0	12.21.10	1539	soil	none	4 16 oz jars			X		X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-006-SASB-SB-5.5	12.21.10	1535	soil	none	5 Encore Samplers	X	X	X																				
SL-046-SASB-SB-4.0-5.0MS	12.21.10	1047	soil	none	6 16 oz. jars			X		X	X	X	X	X	X													
SL-046-SASB-SB-4.5MS	12.21.10	1041	soil	none	12 Encore Samplers	X	X																					
SL-046-SASB-SB-9.0-10.0	12.21.10	1054	soil	none	2 16 oz. jars			X		X	X	X	X	X	X													
SL-047-SASB-SB-4.0-5.0	12.21.10	1254	soil	none	2 16 oz. jars			X		X	X	X	X	X	X													
SL-047-SASB-SB-4.5	12.21.10	1250	soil	none	4 Encore Samplers	X	X																					
SL-159-SASB-SS-0.0-0.5	12.21.10	1037	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
SL-183-SASB-SS-0.0-0.5	12.21.10	1025	soil	none	2 x 16 oz. jars & 16" sleeve			X		X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-183-SASB-SS-0.0-0.5	12.21.10	1025	soil	none	5 Encore Samplers	X	X	X																				
SL-219-SASB-SS-0.0-0.5	12.21.10	0859	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
SL-225-SASB-SS-0.0-0.5	12.21.10	0935	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
SL-226-SASB-SS-0.0-0.5	12.21.10	0950	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
SL-227-SASB-SS-0.0-0.5	12.21.10	0938	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X		X	X										
TB-122110	12.21.10	1212	water	HCl	4-40 mL clear VOA vials	X	X	X																				
Date/Time: 12.21.10 1630 Received by: (Signature) Tracking Numbers 8695 1431 7903, ...7914, ...7925, ...7936						Date/Time: 12/21/10 1056 Received for Laboratory by: (Signature) Laboratory: Lancaster Laboratories, Inc.																		No. of coolers = 4				

SED-002-SIV-SD-0.0-0.5 was an MS/MSD sample
 per PB on 12/22/10. NLM/2/28/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/23/2010

Group Number: 1226926

SDG: DE051

PO Number: 1203-004-007-AL

Release Number: Tracking #11667

State of Sample Origin: CA

Client Sample DescriptionDUP10-SA5B-QC-122210 Soil
EB08-SA5B-122210 Water
FB06-SA5B-122210 Water
SED-010-SIV-SD-0.0-0.5 Soil
SL-101-SA5B-SS-0.0-0.5 Soil
SL-117-SA5B-SS-0.0-0.5 Soil
SL-118-SA5B-SS-0.0-0.5 Soil
SL-100-SA5B-SS-0.0-0.5 Soil
SL-100-SA5B-SS-0.0-0.5MS Soil
SL-100-SA5B-SS-0.0-0.5MSD Soil
SL-100-SA5B-SS-0.0-0.5DUP Soil
SL-114-SA5B-SS-0.0-0.5 Soil
SL-102-SA5B-SS-0.0-0.5 Soil
SL-024-SA5B-SS-0.0-0.5 Soil
SL-157-SA5B-SB-4.0-5.0 Soil
SL-158-SA5B-SB-4.0-5.0 Soil
SL-157-SA5B-SB-9.0-10.0 Soil
SL-145-SA5B-SB-4.0-5.0 Soil
TB-122210 WaterLancaster Labs (LLI) #6173160
6173161
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The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Martha L. Seidel
Senior Chemist

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

DUP10 SDG#: DE051-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	770	U 770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J 19	390		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	39	U 39	190		1
04688	4-Methylphenol	106-44-5	39	U 39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	39	U 39	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	580		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

DUP10 SDG#: DE051-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77 U	0.77	1.9		1
10138	Acenaphthylene	208-96-8	0.39 U	0.39	1.9		1
10138	Anthracene	120-12-7	0.39 U	0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.6 J	0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	2.0	0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	3.7	0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.4 J	0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	1.2 J	0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	7.0 U	7.0	21		1
10138	Di-n-butylphthalate	84-74-2	7.0 U	7.0	21		1
10138	Chrysene	218-01-9	2.2	0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.77 U	0.77	1.9		1
10138	Diethylphthalate	84-66-2	7.0 U	7.0	21		1
10138	Dimethylphthalate	131-11-3	7.0 U	7.0	21		1
10138	Fluoranthene	206-44-0	2.6	0.77	1.9		1
10138	Fluorene	86-73-7	0.77 U	0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.97 J	0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.77 U	0.77	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.77 U	0.77	1.9		1
10138	Naphthalene	91-20-3	0.77 U	0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.77 U	0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	7.0 U	7.0	21		1
10138	Phenanthrene	85-01-8	0.77 U	0.77	1.9		1
10138	Pyrene	129-00-0	2.7	0.77	1.9		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1 U	5.1	10		1
10401	2,4-DB	94-82-6	1.7 J	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93 U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93 U	0.93	2.0		1
10401	MCPA	94-74-6	100 U	100	290		1
10401	MCPP (Mecoprop)	93-65-2	430	87	290		1
10401	2,4,5-T	93-76-5	0.095 U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087 U	0.087	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

2,4-DB was detected in the method blank at a concentration of 1.1 ug/kg. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

DUP10 SDG#: DE051-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
2,4-DB.							
Due to interfering peaks on the chromatogram, the values reported for MCPA represent the lowest reporting limits attainable.							
Pesticides/PCBs							
	SW-846 8081A		ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.070 U	0.070	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	0.93 U	0.93	3.9		1
01363	p,p-DDD	72-54-8	0.16 U	0.16	0.39		1
01363	p,p-DDE	72-55-9	0.076 U	0.076	0.39		1
01363	p,p-DDT	50-29-3	0.29 U	0.29	0.39		1
01363	Delta BHC	319-86-8	0.042 U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.090 U	0.090	0.39		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39		1
01363	Endrin	72-20-8	0.076 U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.076 U	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.070 U	0.070	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.044 U	0.044	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.15 U	0.15	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs							
	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	2.1 J	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.58 U	0.58	2.0		1
10225	PCB-1232	11141-16-5	0.60 U	0.60	2.0		1
10225	PCB-1242	53469-21-9	0.58 U	0.58	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	6.4	0.38	2.0		1
10225	PCB-1260	11096-82-5	2.5	0.38	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,900	5.66	22.5		1
07914	Boron	7440-42-8	4.36 J	1.00	5.62		1
01650	Calcium	7440-70-2	3,070	6.90	22.5		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

DUP10 SDG#: DE051-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	18,600	5.30	22.5		1
01656	Lithium	7439-93-2	21.0	0.25	2.2		1
01657	Magnesium	7439-95-4	4,260	2.86	11.2		1
06958	Manganese	7439-96-5	261	0.0877	0.562		1
10145	Phosphorus	7723-14-0	361	0.630	11.2		1
01662	Potassium	7440-09-7	2,800	20.2	56.2		1
01667	Sodium	7440-23-5	92.3 J	42.0	112		1
07968	Strontium	7440-24-6	18.7	0.0697	0.562		1
06969	Tin	7440-31-5	2.22 J	1.12	11.2		1
06970	Titanium	7440-32-6	1,120	0.427	1.12		1
10146	Zirconium	7440-67-7	1.88 J	0.945	5.62		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0960 J	0.0695	0.232		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.90	0.0695	0.463		2
06126	Barium	7440-39-3	98.1	0.125	0.463		2
06127	Beryllium	7440-41-7	0.467	0.0185	0.116		2
06128	Cadmium	7440-43-9	0.133	0.0417	0.116		2
06131	Chromium	7440-47-3	16.6	0.139	0.463		2
06132	Cobalt	7440-48-4	5.52	0.0232	0.116		2
06133	Copper	7440-50-8	11.2	0.0735	0.446		2
06135	Lead	7439-92-1	5.68	0.0121	0.232		2
06138	Molybdenum	7439-98-7	0.615	0.0579	0.116		2
06139	Nickel	7440-02-0	11.8	0.116	0.463		2
06141	Selenium	7782-49-2	0.121 J	0.0463	0.463		2
06142	Silver	7440-22-4	0.0302 J	0.0139	0.116		2
06145	Thallium	7440-28-0	0.259	0.0348	0.116		2
06148	Vanadium	7440-62-2	39.4	0.0245	0.111		2
06149	Zinc	7440-66-6	56.2	0.649	3.48		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0128 J	0.0032	0.113		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.93	1.2		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.8		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.39 J	0.23	1.2		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	429	10.0	10.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

DUP10 SDG#: DE051-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.17	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	13.7	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 02:15	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 12:20	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	103645708002	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 04:53	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 18:08	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 05:52	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

DUP10 SDG#: DE051-01FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:28	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 13:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:28	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:20	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 12:11	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 20:56	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 19:21	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

EB-08 SDG#: DE051-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1 U	1	5		1
04678	Benzidine	92-87-5	21 U	21	64		1
04678	Benzoic acid	65-85-0	6 U	6	16		1
04678	Benzyl alcohol	100-51-6	5 U	5	16		1
04678	4-Bromophenyl-phenylether	101-55-3	1 U	1	5		1
04678	Carbazole	86-74-8	1 U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1 U	1	5		1
04678	4-Chloroaniline	106-47-8	1 U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1 U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1 U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1 U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2 U	2	5		1
04678	2-Chlorophenol	95-57-8	1 U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2 U	2	5		1
04678	Dibenzofuran	132-64-9	1 U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2 U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1 U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3 U	3	11		1
04678	3,5-Dimethylphenol	108-68-9	3 U	3	11		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5 U	5	16		1
04678	2,4-Dinitrophenol	51-28-5	11 U	11	32		1
04678	2,4-Dinitrotoluene	121-14-2	1 U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1 U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1 U	1	5		1
04678	Hexachlorobenzene	118-74-1	1 U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1 U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5 U	5	16		1
04678	Hexachloroethane	67-72-1	1 U	1	5		1
04678	Isophorone	78-59-1	1 U	1	5		1
04678	2-Methylphenol	95-48-7	1 U	1	5		1
04678	4-Methylphenol	106-44-5	2 U	2	5		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1 U	1	5		1
04678	3-Nitroaniline	99-09-2	1 U	1	5		1
04678	4-Nitroaniline	100-01-6	1 U	1	5		1
04678	Nitrobenzene	98-95-3	1 U	1	5		1
04678	2-Nitrophenol	88-75-5	1 U	1	5		1
04678	4-Nitrophenol	100-02-7	11 U	11	32		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3 U	3	16		1
04678	Phenol	108-95-2	1 U	1	5		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

EB-08 SDG#: DE051-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1 U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1 U	1	5		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.011 U	0.011	0.053		1
10137	Acenaphthylene	208-96-8	0.011 U	0.011	0.053		1
10137	Anthracene	120-12-7	0.011 U	0.011	0.053		1
10137	Benzo(a)anthracene	56-55-3	0.011 U	0.011	0.053		1
10137	Benzo(a)pyrene	50-32-8	0.011 U	0.011	0.053		1
10137	Benzo(b)fluoranthene	205-99-2	0.011 U	0.011	0.053		1
10137	Benzo(g,h,i)perylene	191-24-2	0.011 U	0.011	0.053		1
10137	Benzo(k)fluoranthene	207-08-9	0.011 U	0.011	0.053		1
10137	Butylbenzylphthalate	85-68-7	0.067 J	0.053	1.1		1
10137	Di-n-butylphthalate	84-74-2	0.40 J	0.053	1.1		1
10137	Chrysene	218-01-9	0.011 U	0.011	0.053		1
10137	Dibenz(a,h)anthracene	53-70-3	0.011 U	0.011	0.053		1
10137	Diethylphthalate	84-66-2	0.098 J	0.053	1.1		1
10137	Dimethylphthalate	131-11-3	0.053 J	0.053	1.1		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.25 J	0.053	1.1		1
10137	Fluoranthene	206-44-0	0.011 U	0.011	0.053		1
10137	Fluorene	86-73-7	0.011 U	0.011	0.053		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.011 U	0.011	0.053		1
10137	1-Methylnaphthalene	90-12-0	0.011 U	0.011	0.053		1
10137	2-Methylnaphthalene	91-57-6	0.011 U	0.011	0.053		1
10137	Naphthalene	91-20-3	0.034 J	0.011	0.053		1
10137	N-Nitrosodimethylamine	62-75-9	0.011 U	0.011	0.053		1
10137	Di-n-octylphthalate	117-84-0	0.083 J	0.053	1.1		1
10137	Phenanthrene	85-01-8	0.011 U	0.011	0.053		1
10137	Pyrene	129-00-0	0.011 U	0.011	0.053		1

The QC limits for n-nitrosodimethylamine and dimethylphthalate are advisory only until sufficient data points can be obtained to calculate statistical limits.

The following compounds were detected in the method blank at the respective concentrations of:

butylbenzylphthalate .056 ug/l

bis(2-ethylhexyl)phthalate .056 ug/l

di-n-octylphthalate .082 ug/l

These blank values were not subtracted from the analytical results.

Reporting limits were raised due to limited sample volume.

Herbicides	SW-846 8151A	ug/l	ug/l	ug/l	ug/l
10407 2,4-D	94-75-7	0.16 U	0.16	0.51	1
10407 Dalapon	75-99-0	0.26 U	0.26	1.3	1
10407 2,4-DB	94-82-6	0.31 U	0.31	1.0	1
10407 Dicamba	1918-00-9	0.082 U	0.082	0.31	1
10407 Dinoseb	88-85-7	0.10 U	0.10	0.51	1
10407 2,4-DP (Dichlorprop)	120-36-5	0.16 U	0.16	0.51	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

EB-08 SDG#: DE051-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/l	ug/l	ug/l	ug/l	
10407	MCPA	94-74-6	310 U	310	1,000		1
10407	MCPP	93-65-2	51 U	51	200		1
10407	2,4,5-T	93-76-5	0.015 U	0.015	0.051		1
10407	2,4,5-TP	93-72-1	0.010 U	0.010	0.051		1
Pesticides/PCBs		SW-846 8081A	ug/l	ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0021 U	0.0021	0.010		1
00177	Alpha BHC	319-84-6	0.0031 U	0.0031	0.010		1
00177	Beta BHC	319-85-7	0.0030 U	0.0030	0.010		1
00177	Gamma BHC - Lindane	58-89-9	0.0021 U	0.0021	0.010		1
00177	Chlordane	57-74-9	0.12 U	0.12	0.52		1
00177	p,p-DDD	72-54-8	0.0052 U	0.0052	0.021		1
00177	p,p-DDE	72-55-9	0.0052 U	0.0052	0.021		1
00177	p,p-DDT	50-29-3	0.0052 U	0.0052	0.021		1
00177	Delta BHC	319-86-8	0.0030 U	0.0030	0.010		1
00177	Dieldrin	60-57-1	0.0055 U	0.0055	0.021		1
00177	Endosulfan I	959-98-8	0.0045 U	0.0045	0.010		1
00177	Endosulfan II	33213-65-9	0.016 U	0.016	0.021		1
00177	Endosulfan Sulfate	1031-07-8	0.0060 U	0.0060	0.021		1
00177	Endrin	72-20-8	0.0084 U	0.0084	0.021		1
00177	Endrin Aldehyde	7421-93-4	0.021 U	0.021	0.10		1
00177	Endrin Ketone	53494-70-5	0.0052 U	0.0052	0.021		1
00177	Heptachlor	76-44-8	0.0027 U	0.0027	0.010		1
00177	Heptachlor Epoxide	1024-57-3	0.0024 U	0.0024	0.010		1
00177	Methoxychlor	72-43-5	0.031 U	0.031	0.10		1
00177	Mirex	2385-85-5	0.088 U	0.088	0.26		1
00177	Toxaphene	8001-35-2	1.0 U	1.0	3.1		1
Pesticides/PCBs		SW-846 8082	ug/l	ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10 U	0.10	0.52		1
10227	Aroclor 5442	12642-23-8	0.10 U	0.10	0.52		1
10227	Aroclor 5460	11126-42-4	0.10 U	0.10	0.52		1
10227	PCB-1016	12674-11-2	0.10 U	0.10	0.52		1
10227	PCB-1221	11104-28-2	0.10 U	0.10	0.52		1
10227	PCB-1232	11141-16-5	0.21 U	0.21	0.52		1
10227	PCB-1242	53469-21-9	0.10 U	0.10	0.52		1
10227	PCB-1248	12672-29-6	0.10 U	0.10	0.52		1
10227	PCB-1254	11097-69-1	0.10 U	0.10	0.52		1
10227	PCB-1260	11096-82-5	0.10 U	0.10	0.52		1
10227	PCB-1262	37324-23-5	0.21 U	0.21	0.52		1
10227	PCB-1268	11100-14-4	0.17 U	0.17	0.52		1
Metals		SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0640 J	0.0522	0.200		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

EB-08 SDG#: DE051-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
		SW-846 6020	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000055 J	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
		SW-846 7470A	mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
		EPA 314.0	ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
		SW-846 7199	ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

EB-08 SDG#: DE051-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10362WAE026	01/20/2011 14:57	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362WAC026	01/06/2011 13:09	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	10362WAE026	12/29/2010 00:30	Sherry L Morrow	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	10362WAC026	12/28/2010 16:15	Timothy J Attenberger	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103620008A	12/31/2010 01:07	Michele D Hamilton	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103570023A	01/14/2011 00:54	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103570024A	01/06/2011 16:49	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103570024A	12/26/2010 12:20	Karen L Beyer	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103570023A	12/26/2010 12:20	Karen L Beyer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103620008A	12/28/2010 20:30	Elaine F Stoltzfus	1
01743	Aluminum	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
08014	Boron	SW-846 6010B	1	103651848001	01/05/2011 18:36	John P Hook	1
01750	Calcium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
01754	Iron	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
01756	Lithium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
07058	Manganese	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
10143	Phosphorus	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
01762	Potassium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
01767	Sodium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
08068	Strontium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
07069	Tin	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
07070	Titanium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
10144	Zirconium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
06024	Antimony	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103656050001D	01/06/2011 08:26	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103656050001C	01/06/2011 08:26	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103656050001B	01/06/2011 08:26	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103575713005	12/28/2010 15:39	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

EB-08 SDG#: DE051-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103651848001	01/04/2011 08:43	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103656050001	01/04/2011 08:40	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103575713005	12/23/2010 15:50	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10364196902A	12/31/2010 00:43	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10363658701A	12/29/2010 15:17	Ashley M Adams	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10357113001A	12/23/2010 13:52	Nicole M Kepley	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6 U	6	20		1
10904	Benzene	71-43-2	0.5 U	0.5	5		1
10904	Bromobenzene	108-86-1	1 U	1	5		1
10904	Bromochloromethane	74-97-5	1 U	1	5		1
10904	Bromodichloromethane	75-27-4	1 U	1	5		1
10904	Bromoform	75-25-2	1 U	1	5		1
10904	Bromomethane	74-83-9	1 U	1	5		1
10904	2-Butanone	78-93-3	3 U	3	10		1
10904	n-Butylbenzene	104-51-8	1 U	1	5		1
10904	sec-Butylbenzene	135-98-8	1 U	1	5		1
10904	tert-Butylbenzene	98-06-6	1 U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1 U	1	5		1
10904	Chlorobenzene	108-90-7	0.8 U	0.8	5		1
10904	Chloroethane	75-00-3	1 U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2 U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10904	Chloroform	67-66-3	1 J	0.8	5		1
10904	Chloromethane	74-87-3	1 U	1	5		1
10904	2-Chlorotoluene	95-49-8	1 U	1	5		1
10904	4-Chlorotoluene	106-43-4	1 U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2 U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2 U	2	5		1
10904	Dibromochloromethane	124-48-1	1 U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1 U	1	5		1
10904	Dibromomethane	74-95-3	1 U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2 U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1 U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1 U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8 U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8 U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8 U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1 U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1 U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1 U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1 U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1 U	1	5		1
10904	Ethylbenzene	100-41-4	0.8 U	0.8	5		1
10904	Freon 113	76-13-1	2 U	2	10		1
10904	Freon 133a	75-88-7	2 U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2 U	2	5		1
10904	2-Hexanone	591-78-6	3 U	3	10		1
10904	Isopropylbenzene	98-82-8	1 U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1 U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3 U	3	10		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2 U	2	5		1
10904	n-Propylbenzene	103-65-1	1 U	1	5		1
10904	Styrene	100-42-5	1 U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8 U	0.8	5		1
10904	Toluene	108-88-3	0.7 U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1 U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8 U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8 U	0.8	5		1
10904	Trichloroethene	79-01-6	1 U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2 U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1 U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5		1
10904	Vinyl Chloride	75-01-4	1 U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8 U	0.8	5		1
10904	o-Xylene	95-47-6	0.8 U	0.8	5		1
GC/MS	Volatiles	SW-846 8260B SIM	ug/l	ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5 U	0.5	2.0		1
GC/MS	Semivolatiles	EPA 1625C	ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	1.82	0.522	1.04		1
N-Nitrosodimethylamine was detected in the method blank at a concentration of 1.95 ng/l. The blank value was not subtracted from the analytical result. Sufficient sample was unavailable to repeat the analysis.							
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1 U	1	5		1
04678	Benzidine	92-87-5	19 U	19	57		1
04678	Benzoic acid	65-85-0	6 U	6	14		1
04678	Benzyl alcohol	100-51-6	5 U	5	14		1
04678	4-Bromophenyl-phenylether	101-55-3	1 U	1	5		1
04678	Carbazole	86-74-8	1 U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1 U	1	5		1
04678	4-Chloroaniline	106-47-8	1 U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1 U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1 U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1 U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2 U	2	5		1
04678	2-Chlorophenol	95-57-8	1 U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2 U	2	5		1
04678	Dibenzofuran	132-64-9	1 U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2 U	2	5		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
04678	2,4-Dichlorophenol	120-83-2	1 U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3 U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3 U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5 U	5	14		1
04678	2,4-Dinitrophenol	51-28-5	10 U	10	29		1
04678	2,4-Dinitrotoluene	121-14-2	1 U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1 U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1 U	1	5		1
04678	Hexachlorobenzene	118-74-1	1 U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1 U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5 U	5	14		1
04678	Hexachloroethane	67-72-1	1 U	1	5		1
04678	Isophorone	78-59-1	1 U	1	5		1
04678	2-Methylphenol	95-48-7	1 U	1	5		1
04678	4-Methylphenol	106-44-5	2 U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04678	2-Nitroaniline	88-74-4	1 U	1	5		1
04678	3-Nitroaniline	99-09-2	1 U	1	5		1
04678	4-Nitroaniline	100-01-6	1 U	1	5		1
04678	Nitrobenzene	98-95-3	1 U	1	5		1
04678	2-Nitrophenol	88-75-5	1 U	1	5		1
04678	4-Nitrophenol	100-02-7	10 U	10	29		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3 U	3	14		1
04678	Phenol	108-95-2	1 U	1	5		1
04678	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1 U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1 U	1	5		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010 U	0.010	0.052		1
10137	Acenaphthylene	208-96-8	0.010 U	0.010	0.052		1
10137	Anthracene	120-12-7	0.010 U	0.010	0.052		1
10137	Benzo(a)anthracene	56-55-3	0.010 U	0.010	0.052		1
10137	Benzo(a)pyrene	50-32-8	0.010 U	0.010	0.052		1
10137	Benzo(b)fluoranthene	205-99-2	0.010 U	0.010	0.052		1
10137	Benzo(g,h,i)perylene	191-24-2	0.010 U	0.010	0.052		1
10137	Benzo(k)fluoranthene	207-08-9	0.010 U	0.010	0.052		1
10137	Butylbenzylphthalate	85-68-7	0.065 J	0.052	1.0		1
10137	Di-n-butylphthalate	84-74-2	0.069 J	0.052	1.0		1
10137	Chrysene	218-01-9	0.010 U	0.010	0.052		1
10137	Dibenz(a,h)anthracene	53-70-3	0.010 U	0.010	0.052		1
10137	Diethylphthalate	84-66-2	0.052 U	0.052	1.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	ug/l	
10137	Dimethylphthalate	131-11-3	0.052 U	0.052	1.0		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.22 J	0.052	1.0		1
10137	Fluoranthene	206-44-0	0.010 U	0.010	0.052		1
10137	Fluorene	86-73-7	0.010 U	0.010	0.052		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010 U	0.010	0.052		1
10137	1-Methylnaphthalene	90-12-0	0.017 J	0.010	0.052		1
10137	2-Methylnaphthalene	91-57-6	0.022 J	0.010	0.052		1
10137	Naphthalene	91-20-3	0.29	0.010	0.052		1
10137	N-Nitrosodimethylamine	62-75-9	0.010 U	0.010	0.052		1
10137	Di-n-octylphthalate	117-84-0	0.087 J	0.052	1.0		1
10137	Phenanthrene	85-01-8	0.010 U	0.010	0.052		1
10137	Pyrene	129-00-0	0.010 U	0.010	0.052		1

The QC limits for n-nitrosodimethylamine and dimethylphthalate are advisory only until sufficient data points can be obtained to calculate statistical limits.

The following compounds were detected in the method blank at the respective concentrations of:

butylbenzylphthalate .056 ug/l

bis(2-ethylhexyl)phthalate .056 ug/l

di-n-octylphthalate .082 ug/l

These blank values were not subtracted from the analytical results.

GC Volatiles	TPH GRO	SW-8015B	ug/l	ug/l	ug/l	ug/l
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50	1

Explosives	SW-846 8330A	ug/l	ug/l	ug/l	ug/l
10131	4-Amino-2,6-Dinitrotoluene	19406-51-0	0.30 U	0.30	0.60
10131	2-Amino-4,6-Dinitrotoluene	35572-78-2	0.20 U	0.20	0.60
10131	2,6-Diamino-4-nitrotoluene	59229-75-3	0.20 U	0.20	0.60
10131	2,4-Diamino-6-nitrotoluene	6629-29-4	0.20 U	0.20	0.60
10131	1,3-Dinitrobenzene	99-65-0	0.20 U	0.20	0.60
10131	2,4-Dinitrotoluene	121-14-2	0.20 U	0.20	0.60
10131	2,6-Dinitrotoluene	606-20-2	0.20 U	0.20	0.60
10131	HMX	2691-41-0	0.65 U	0.65	2.0
10131	Nitrobenzene	98-95-3	0.20 U	0.20	0.60
10131	Nitroglycerin	55-63-0	5.2 U	5.2	15
10131	2-Nitrotoluene	88-72-2	0.20 U	0.20	0.60

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/l		ug/l	ug/l	ug/l	
10131	3-Nitrotoluene	99-08-1	0.40	U	0.40	1.2	1000000 0	1
10131	4-Nitrotoluene	99-99-0	0.60	U	0.60	1.2	1000000 0	1
10131	PETN	78-11-5	6.0	U	6.0	18	1000000 0	1
10131	RDX	121-82-4	0.20	U	0.20	0.60	1000000 0	1
10131	Tetryl	479-45-8	0.40	U	0.40	0.60	1000000 0	1
10131	1,3,5-Trinitrobenzene	99-35-4	0.20	U	0.20	0.60	1000000 0	1
10131	2,4,6-Trinitrotoluene	118-96-7	0.20	U	0.20	0.60	1000000 0	1
Herbicides		SW-846 8151A	ug/l		ug/l	ug/l	ug/l	
10407	2,4-D	94-75-7	0.16	U	0.16	0.50		1
10407	Dalapon	75-99-0	0.25	U	0.25	1.2		1
10407	2,4-DB	94-82-6	0.30	U	0.30	1.0		1
10407	Dicamba	1918-00-9	0.080	U	0.080	0.30		1
10407	Dinoseb	88-85-7	0.10	U	0.10	0.50		1
10407	2,4-DP (Dichlorprop)	120-36-5	0.16	U	0.16	0.50		1
10407	MCPA	94-74-6	300	U	300	1,000		1
10407	MCPP	93-65-2	50	U	50	200		1
10407	2,4,5-T	93-76-5	0.015	U	0.015	0.050		1
10407	2,4,5-TP	93-72-1	0.010	U	0.010	0.050		1
HPLC Organics		SW-846 8315A	ug/l		ug/l	ug/l	ug/l	
04144	17b Formaldehyde by 8315A	50-00-0	10	U	10	50		1
Pesticides/PCBs		SW-846 8081A	ug/l		ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0020	U	0.0020	0.010		1
00177	Alpha BHC	319-84-6	0.0030	U	0.0030	0.010		1
00177	Beta BHC	319-85-7	0.0040	U	0.0040	0.010		1
00177	Gamma BHC - Lindane	58-89-9	0.0020	U	0.0020	0.010		1
00177	Chlordane	57-74-9	0.12	U	0.12	0.50		1
00177	p,p-DDD	72-54-8	0.0050	U	0.0050	0.020		1
00177	p,p-DDE	72-55-9	0.0050	U	0.0050	0.020		1
00177	p,p-DDT	50-29-3	0.0050	U	0.0050	0.020		1
00177	Delta BHC	319-86-8	0.0029	U	0.0029	0.010		1
00177	Dieldrin	60-57-1	0.0053	U	0.0053	0.020		1
00177	Endosulfan I	959-98-8	0.0043	U	0.0043	0.010		1
00177	Endosulfan II	33213-65-9	0.015	U	0.015	0.020		1
00177	Endosulfan Sulfate	1031-07-8	0.0058	U	0.0058	0.020		1
00177	Endrin	72-20-8	0.0081	U	0.0081	0.020		1
00177	Endrin Aldehyde	7421-93-4	0.020	U	0.020	0.10		1
00177	Endrin Ketone	53494-70-5	0.0050	U	0.0050	0.020		1
00177	Heptachlor	76-44-8	0.0026	U	0.0026	0.010		1
00177	Heptachlor Epoxide	1024-57-3	0.0023	U	0.0023	0.010		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/l	ug/l	ug/l	ug/l	
00177	Methoxychlor	72-43-5	0.030 U	0.030	0.10		1
00177	Mirex	2385-85-5	0.084 U	0.084	0.25		1
00177	Toxaphene	8001-35-2	1.0 U	1.0	3.0		1
Pesticides/PCBs		SW-846 8082	ug/l	ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10 U	0.10	0.50		1
10227	Aroclor 5442	12642-23-8	0.10 U	0.10	0.50		1
10227	Aroclor 5460	11126-42-4	0.10 U	0.10	0.50		1
10227	PCB-1016	12674-11-2	0.10 U	0.10	0.50		1
10227	PCB-1221	11104-28-2	0.10 U	0.10	0.50		1
10227	PCB-1232	11141-16-5	0.20 U	0.20	0.50		1
10227	PCB-1242	53469-21-9	0.10 U	0.10	0.50		1
10227	PCB-1248	12672-29-6	0.10 U	0.10	0.50		1
10227	PCB-1254	11097-69-1	0.10 U	0.10	0.50		1
10227	PCB-1260	11096-82-5	0.10 U	0.10	0.50		1
10227	PCB-1262	37324-23-5	0.20 U	0.20	0.50		1
10227	PCB-1268	11100-14-4	0.16 U	0.16	0.50		1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH		SW-846 8015B modified	mg/l	mg/l	mg/l	mg/l	
10365	EFH (C12-C14)	n.a.	0.10 U	0.10	0.60		1
10365	EFH (C15-C20)	n.a.	0.10 U	0.10	0.60		1
10365	EFH (C21-C30)	n.a.	0.10 U	0.10	0.60		1
10365	EFH (C30 - C40)	n.a.	0.10 U	0.10	0.60		1
10365	EFH (C8-C11)	n.a.	0.10 U	0.10	0.60		1
GC Miscellaneous		SW-846 8015B	ug/l	ug/l	ug/l	ug/l	
06624	Ethanol	64-17-5	200 U	200	1,000		1
06624	Isopropanol	67-63-0	200 U	200	1,000		1
06624	Methanol	67-56-1	200 U	200	1,000		1
GC Miscellaneous		SW-846 8015B modified	mg/l	mg/l	mg/l	mg/l	
08278	Diethylene glycol	111-46-6	14 U	14	100		1
08278	Ethylene glycol	107-21-1	14 U	14	100		1
08278	Propylene glycol	57-55-6	10 U	10	100		1
The sample was run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis. Reporting limits were raised due to interference from the sample matrix.							
Terphenyls		SW-846 8015B	mg/l	mg/l	mg/l	mg/l	
10319	m-Terphenyl	92-06-8	0.084 U	0.084	0.26		1
10319	o-Terphenyl	84-15-1	0.084 U	0.084	0.26		1
10319	p-Terphenyl	92-94-4	0.084 U	0.084	0.26		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
		SW-846 6020	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
		SW-846 7470A	mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
00368	11b Anions by 300.0 - Nitrate	14797-55-8	0.050 U	0.050	0.10		1
		EPA 314.0	ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
		SW-846 7199	ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1
		SW-846 9012B	mg/l	mg/l	mg/l	mg/l	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
08255	21b Cyanide by 9012B	57-12-5	0.0050 U	0.0050	0.010	mg/l	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y103631AA	12/29/2010 04:41	Frank A Valla, Jr	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103562AB	12/28/2010 12:27	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103562AB	12/28/2010 12:27	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y103631AA	12/29/2010 04:41	Frank A Valla, Jr	1
10962	19b NDMA by 1625C	EPA 1625C	1	10362WAA026	01/06/2011 06:49	Timothy J Trees	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10362WAE026	01/20/2011 15:23	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362WAC026	01/06/2011 13:42	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	10362WAE026	12/29/2010 00:30	Sherry L Morrow	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	10362WAC026	12/28/2010 16:15	Timothy J Attenberger	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	10362WAA026	12/28/2010 12:25	Wanda F Oswald	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	10363B20A	12/29/2010 20:35	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10363B20A	12/29/2010 20:35	Marie D John	1
10131	20b Energetics by 8330A	SW-846 8330A	1	103610006A	12/28/2010 19:06	Michele D Hamilton	1
04144	17b Formaldehyde by 8315A	SW-846 8315A	1	103560024A	12/23/2010 20:05	Michele D Hamilton	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103620008A	12/31/2010 01:34	Michele D Hamilton	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103570023A	01/14/2011 01:06	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103570024A	01/06/2011 17:08	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103570024A	12/26/2010 12:20	Karen L Beyer	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103570023A	12/26/2010 12:20	Karen L Beyer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103620008A	12/28/2010 20:30	Elaine F Stoltzfus	1
01013	Formaldehyde Extraction	SW-846 8315A	1	103560024A	12/23/2010 15:00	Denise L Trimby	1
11122	Energetics Extraction	SW-846 8330	1	103610006A	12/27/2010 16:30	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

FB-06 SDG#: DE051-03FB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10365	9b TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620004A	12/30/2010 17:13	Heather E Williams	1
06624	25b Alcohols by 8015B	SW-846 8015B	1	103630029A	12/29/2010 21:34	Dustin A Underkoffler	1
08278	27b Glycols by 8015B	SW-846 8015B modified	1	103640032A	12/31/2010 17:03	Robert Brown	1
10319	26b Terphenyls by 8015B	SW-846 8015B	1	103620021A	01/04/2011 23:50	Heather E Williams	1
11203	Boeing EFH Waters Extraction	SW-846 3510C	1	103620004A	12/28/2010 16:15	Timothy J Attenberger	1
10304	Terphenyls water prep	SW-846 3510C	1	103620021A	12/29/2010 00:30	Sherry L Morrow	1
01743	Aluminum	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
08014	Boron	SW-846 6010B	1	103651848001	01/05/2011 18:39	John P Hook	1
01750	Calcium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
01754	Iron	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
01756	Lithium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
07058	Manganese	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
10143	Phosphorus	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
01762	Potassium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
01767	Sodium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
08068	Strontium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
07069	Tin	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
07070	Titanium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
10144	Zirconium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
06024	Antimony	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103656050001D	01/06/2011 08:29	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103656050001C	01/06/2011 08:29	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103656050001B	01/06/2011 08:29	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103575713005	12/28/2010 15:41	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103651848001	01/04/2011 08:43	Denise K Connors	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103656050001	01/04/2011 08:40	Denise K Connors	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103575713005	12/23/2010 15:50	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10356196903A	12/23/2010 16:31	Ashley M Adams	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

FB-06 SDG#: DE051-03FB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00368	11b Anions by 300.0 - Nitrate	EPA 300.0	1	10356196903A	12/23/2010 16:31	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10363658701A	12/29/2010 15:41	Ashley M Adams	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10357113001A	12/23/2010 14:05	Nicole M Kepley	1
08255	21b Cyanide by 9012B	SW-846 9012B	1	10365117102A	12/31/2010 19:34	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012B	1	10365117102A	12/31/2010 10:40	Carolyn M Mastropietro	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SD010 SDG#: DE051-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	610		1
04688	Benzidine	92-87-5	1,400	U 1,400	4,100		1
04688	Benzoic acid	65-85-0	200	U 200	610		1
04688	Benzyl alcohol	100-51-6	200	U 200	610		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200		1
04688	Carbazole	86-74-8	20	U 20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	41	U 41	200		1
04688	4-Chloroaniline	106-47-8	81	U 81	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200		1
04688	2-Chlorophenol	95-57-8	20	U 20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	41	U 41	200		1
04688	Dibenzofuran	132-64-9	20	U 20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	410		1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200		1
04688	2,4-Dimethylphenol	105-67-9	41	U 41	200		1
04688	3,5-Dimethylphenol	108-68-9	41	U 41	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	610		1
04688	2,4-Dinitrophenol	51-28-5	810	U 810	2,400		1
04688	2,4-Dinitrotoluene	121-14-2	41	U 41	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	130	J 20	410		1
04688	Hexachlorobenzene	118-74-1	20	U 20	200		1
04688	Hexachlorobutadiene	87-68-3	81	U 81	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	610		1
04688	Hexachloroethane	67-72-1	20	U 20	200		1
04688	Isophorone	78-59-1	20	U 20	200		1
04688	2-Methylphenol	95-48-7	41	U 41	200		1
04688	4-Methylphenol	106-44-5	41	U 41	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U 20	200		1
04688	3-Nitroaniline	99-09-2	41	U 41	200		1
04688	4-Nitroaniline	100-01-6	81	U 81	200		1
04688	Nitrobenzene	98-95-3	20	U 20	200		1
04688	2-Nitrophenol	88-75-5	20	U 20	200		1
04688	4-Nitrophenol	100-02-7	200	U 200	610		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U 200	610		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SD010 SDG#: DE051-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	20	U 20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U 20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	41	U 41	200		1
04688	2,4,6-Trichlorophenol	88-06-2	41	U 41	200		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.81 U	0.81	2.0		1
10138	Acenaphthylene	208-96-8	0.41 U	0.41	2.0		1
10138	Anthracene	120-12-7	0.41 U	0.41	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.81 U	0.81	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.81 U	0.81	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	1.2 J	0.81	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.81 U	0.81	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.81 U	0.81	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.3 U	7.3	22		1
10138	Di-n-butylphthalate	84-74-2	7.3 U	7.3	22		1
10138	Chrysene	218-01-9	1.1 J	0.41	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.81 U	0.81	2.0		1
10138	Diethylphthalate	84-66-2	7.3 U	7.3	22		1
10138	Dimethylphthalate	131-11-3	7.3 U	7.3	22		1
10138	Fluoranthene	206-44-0	1.1 J	0.81	2.0		1
10138	Fluorene	86-73-7	0.81 U	0.81	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.81 U	0.81	2.0		1
10138	1-Methylnaphthalene	90-12-0	0.81 U	0.81	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.81 U	0.81	2.0		1
10138	Naphthalene	91-20-3	1.0 J	0.81	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.81 U	0.81	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.3 U	7.3	22		1
10138	Phenanthrene	85-01-8	1.8 J	0.81	2.0		1
10138	Pyrene	129-00-0	1.0 J	0.81	2.0		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.5 U	1.5	4.4		1
10401	Dalapon	75-99-0	5.4 U	5.4	11		1
10401	2,4-DB	94-82-6	0.76 U	0.76	2.1		1
10401	Dicamba	1918-00-9	0.74 U	0.74	0.74		1
10401	Dinoseb	88-85-7	0.98 U	0.98	2.9		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.98 U	0.98	2.1		1
10401	MCPA	94-74-6	290 U	290	310		1
10401	MCPP (Mecoprop)	93-65-2	92 U	92	310		1
10401	2,4,5-T	93-76-5	0.10 U	0.10	0.21		1
10401	2,4,5-TP	93-72-1	0.092 U	0.092	0.21		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SD010 SDG#: DE051-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
compounds were affected: MCPA. Due to interfering peaks on the chromatogram, the values reported for dicamba represent the lowest reporting limits attainable.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.081 U	0.081	0.20		1
01363	Alpha BHC	319-84-6	0.042 U	0.042	0.20		1
01363	Beta BHC	319-85-7	0.073 U	0.073	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.042 U	0.042	0.20		1
01363	Chlordane	57-74-9	3.7 U	3.7	4.2		1
01363	p,p-DDD	72-54-8	0.22 U	0.22	0.42		1
01363	p,p-DDE	72-55-9	1.1	0.081	0.42		1
01363	p,p-DDT	50-29-3	0.90 U	0.90	0.90		1
01363	Delta BHC	319-86-8	0.11 U	0.11	0.20		1
01363	Dieldrin	60-57-1	0.31 U	0.31	0.42		1
01363	Endosulfan I	959-98-8	0.21 U	0.21	0.21		1
01363	Endosulfan II	33213-65-9	0.44 U	0.44	0.44		1
01363	Endosulfan Sulfate	1031-07-8	0.61 U	0.61	0.61		1
01363	Endrin	72-20-8	0.081 U	0.081	0.42		1
01363	Endrin Aldehyde	7421-93-4	0.33 U	0.33	0.42		1
01363	Endrin Ketone	53494-70-5	0.30 U	0.30	0.42		1
01363	Heptachlor	76-44-8	0.073 U	0.073	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.067 U	0.067	0.20		1
01363	Methoxychlor	72-43-5	1.3 U	1.3	2.0		1
01363	Mirex	2385-85-5	0.50 U	0.50	0.50		1
01363	Toxaphene	8001-35-2	2.7 U	2.7	8.1		1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	4.0	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	4.0	1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	4.0	1
10225	PCB-1016	12674-11-2	0.40 U	0.40	2.1	1
10225	PCB-1221	11104-28-2	0.61 U	0.61	2.1	1
10225	PCB-1232	11141-16-5	0.63 U	0.63	2.1	1
10225	PCB-1242	53469-21-9	0.61 U	0.61	2.1	1
10225	PCB-1248	12672-29-6	0.40 U	0.40	2.1	1
10225	PCB-1254	11097-69-1	2.0 J	0.40	2.1	1
10225	PCB-1260	11096-82-5	1.2 J	0.40	2.1	1
10225	PCB-1262	37324-23-5	0.40 U	0.40	2.1	1
10225	PCB-1268	11100-14-4	0.40 U	0.40	2.1	1

Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg
01643	Aluminum	7429-90-5	8,910	5.96	23.7	1
07914	Boron	7440-42-8	6.51	1.06	5.93	1
01650	Calcium	7440-70-2	4,260	7.27	23.7	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SD010 SDG#: DE051-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	15,400	5.58	23.7		1
01656	Lithium	7439-93-2	23.2	0.26	2.4		1
01657	Magnesium	7439-95-4	3,720	3.01	11.9		1
06958	Manganese	7439-96-5	301	0.0925	0.593		1
10145	Phosphorus	7723-14-0	378	0.664	11.9		1
01662	Potassium	7440-09-7	2,890	21.3	59.3		1
01667	Sodium	7440-23-5	56.7 J	44.2	119		1
07968	Strontium	7440-24-6	13.2	0.0735	0.593		1
06969	Tin	7440-31-5	2.40 J	1.19	11.9		1
06970	Titanium	7440-32-6	873	0.450	1.19		1
10146	Zirconium	7440-67-7	0.996 U	0.996	5.93		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0698 U	0.0698	0.233		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.04	0.0698	0.465		2
06126	Barium	7440-39-3	72.5	0.126	0.465		2
06127	Beryllium	7440-41-7	0.407	0.0186	0.116		2
06128	Cadmium	7440-43-9	0.152	0.0419	0.116		2
06131	Chromium	7440-47-3	11.8	0.140	0.465		2
06132	Cobalt	7440-48-4	4.17	0.0233	0.116		2
06133	Copper	7440-50-8	5.42	0.0775	0.470		2
06135	Lead	7439-92-1	8.58	0.0121	0.233		2
06138	Molybdenum	7439-98-7	0.276	0.0581	0.116		2
06139	Nickel	7440-02-0	8.35	0.116	0.465		2
06141	Selenium	7782-49-2	0.137 J	0.0465	0.465		2
06142	Silver	7440-22-4	0.0232 J	0.0140	0.116		2
06145	Thallium	7440-28-0	0.247	0.0349	0.116		2
06148	Vanadium	7440-62-2	23.9	0.0258	0.117		2
06149	Zinc	7440-66-6	58.0	0.651	3.49		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0093 J	0.0035	0.122		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4	0.98	1.2		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.0 U	11.0	36.6		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.24 U	0.24	1.2		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	434	10.0	10.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SD010 SDG#: DE051-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.98	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	18.1	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 02:50	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 12:52	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	103645708002	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 05:20	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 18:22	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 06:11	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SD010 SDG#: DE051-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:30	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 13:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:30	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:21	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 12:25	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 21:19	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 19:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL101 SDG#: DE051-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	590		1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900		1
04688	Benzoic acid	65-85-0	200	U 200	590		1
04688	Benzyl alcohol	100-51-6	200	U 200	590		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200		1
04688	Carbazole	86-74-8	20	U 20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	200		1
04688	4-Chloroaniline	106-47-8	79	U 79	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200		1
04688	2-Chlorophenol	95-57-8	20	U 20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	200		1
04688	Dibenzofuran	132-64-9	20	U 20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	200		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	590		1
04688	2,4-Dinitrophenol	51-28-5	790	U 790	2,400		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	58	J 20	390		1
04688	Hexachlorobenzene	118-74-1	20	U 20	200		1
04688	Hexachlorobutadiene	87-68-3	79	U 79	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	590		1
04688	Hexachloroethane	67-72-1	20	U 20	200		1
04688	Isophorone	78-59-1	20	U 20	200		1
04688	2-Methylphenol	95-48-7	39	U 39	200		1
04688	4-Methylphenol	106-44-5	39	U 39	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U 20	200		1
04688	3-Nitroaniline	99-09-2	39	U 39	200		1
04688	4-Nitroaniline	100-01-6	79	U 79	200		1
04688	Nitrobenzene	98-95-3	20	U 20	200		1
04688	2-Nitrophenol	88-75-5	20	U 20	200		1
04688	4-Nitrophenol	100-02-7	200	U 200	590		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U 200	590		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL101 SDG#: DE051-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	20	U 20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U 20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	200		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	200		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.79 U	0.79	2.0		1
10138	Acenaphthylene	208-96-8	0.39 U	0.39	2.0		1
10138	Anthracene	120-12-7	0.39 U	0.39	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.79 U	0.79	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.79 U	0.79	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.81 J	0.79	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.79 U	0.79	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.79 U	0.79	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.1 U	7.1	21		1
10138	Di-n-butylphthalate	84-74-2	7.1 U	7.1	21		1
10138	Chrysene	218-01-9	0.67 J	0.39	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.79 U	0.79	2.0		1
10138	Diethylphthalate	84-66-2	7.1 U	7.1	21		1
10138	Dimethylphthalate	131-11-3	7.1 U	7.1	21		1
10138	Fluoranthene	206-44-0	1.6 J	0.79	2.0		1
10138	Fluorene	86-73-7	0.79 U	0.79	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.79 U	0.79	2.0		1
10138	1-Methylnaphthalene	90-12-0	0.79 U	0.79	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.79 U	0.79	2.0		1
10138	Naphthalene	91-20-3	0.91 J	0.79	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.79 U	0.79	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.1 U	7.1	21		1
10138	Phenanthrene	85-01-8	1.6 J	0.79	2.0		1
10138	Pyrene	129-00-0	1.2 J	0.79	2.0		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.2		1
10401	Dalapon	75-99-0	5.2 U	5.2	11		1
10401	2,4-DB	94-82-6	0.73 U	0.73	2.0		1
10401	Dicamba	1918-00-9	0.47 U	0.47	1.4		1
10401	Dinoseb	88-85-7	0.94 U	0.94	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.94 U	0.94	2.0		1
10401	MCPA	94-74-6	180 J	90	290		1
10401	MCPP (Mecoprop)	93-65-2	88 U	88	290		1
10401	2,4,5-T	93-76-5	0.097 U	0.097	0.20		1
10401	2,4,5-TP	93-72-1	0.088 U	0.088	0.20		1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.							
Perchlorate	SW-846 6850 1/2007		ug/kg	ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate EPA 6850	14797-73-0	2.5 U	2.5	5.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL101 SDG#: DE051-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.078 U	0.078	0.20		1
01363	Alpha BHC	319-84-6	0.040 U	0.040	0.20		1
01363	Beta BHC	319-85-7	0.071 U	0.071	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.040 U	0.040	0.20		1
01363	Chlordane	57-74-9	0.94 U	0.94	4.0		1
01363	p,p-DDD	72-54-8	0.078 U	0.078	0.40		1
01363	p,p-DDE	72-55-9	0.078 U	0.078	0.40		1
01363	p,p-DDT	50-29-3	0.078 U	0.078	0.40		1
01363	Delta BHC	319-86-8	0.042 U	0.042	0.20		1
01363	Dieldrin	60-57-1	0.078 U	0.078	0.40		1
01363	Endosulfan I	959-98-8	0.052 U	0.052	0.20		1
01363	Endosulfan II	33213-65-9	0.078 U	0.078	0.40		1
01363	Endosulfan Sulfate	1031-07-8	0.20 J	0.078	0.40		1
01363	Endrin	72-20-8	0.078 U	0.078	0.40		1
01363	Endrin Aldehyde	7421-93-4	0.078 U	0.078	0.40		1
01363	Endrin Ketone	53494-70-5	0.078 U	0.078	0.40		1
01363	Heptachlor	76-44-8	0.071 U	0.071	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.040 U	0.040	0.20		1
01363	Methoxychlor	72-43-5	0.40 U	0.40	2.0		1
01363	Mirex	2385-85-5	0.078 U	0.078	0.40		1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.8		1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.9		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39 U	0.39	2.0		1
10225	PCB-1221	11104-28-2	0.59 U	0.59	2.0		1
10225	PCB-1232	11141-16-5	0.61 U	0.61	2.0		1
10225	PCB-1242	53469-21-9	0.59 U	0.59	2.0		1
10225	PCB-1248	12672-29-6	0.39 U	0.39	2.0		1
10225	PCB-1254	11097-69-1	0.39 U	0.39	2.0		1
10225	PCB-1260	11096-82-5	0.39 U	0.39	2.0		1
10225	PCB-1262	37324-23-5	0.39 U	0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39 U	0.39	2.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	22,700	5.70	22.7		1
07914	Boron	7440-42-8	5.41 J	1.01	5.66		1
01650	Calcium	7440-70-2	3,030	6.94	22.7		1
01654	Iron	7439-89-6	25,400	5.33	22.7		1
01656	Lithium	7439-93-2	23.4	0.25	2.3		1
01657	Magnesium	7439-95-4	4,660	2.88	11.3		1
06958	Manganese	7439-96-5	547	0.0883	0.566		1
10145	Phosphorus	7723-14-0	256	0.634	11.3		1
01662	Potassium	7440-09-7	3,240	20.4	56.6		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL101 SDG#: DE051-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01667	Sodium	7440-23-5	162	42.2	113		1
07968	Strontium	7440-24-6	28.5	0.0702	0.566		1
06969	Tin	7440-31-5	2.50 J	1.13	11.3		1
06970	Titanium	7440-32-6	1,330	0.430	1.13		1
10146	Zirconium	7440-67-7	2.40 J	0.951	5.66		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0982 J	0.0680	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.58	0.0680	0.453		2
06126	Barium	7440-39-3	196	0.306	1.13		5
06127	Beryllium	7440-41-7	0.947	0.0181	0.113		2
06128	Cadmium	7440-43-9	0.485	0.0408	0.113		2
06131	Chromium	7440-47-3	25.8	0.136	0.453		2
06132	Cobalt	7440-48-4	13.3	0.0227	0.113		2
06133	Copper	7440-50-8	13.2	0.0770	0.466		2
06135	Lead	7439-92-1	10.5	0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.888	0.0566	0.113		2
06139	Nickel	7440-02-0	21.2	0.113	0.453		2
06141	Selenium	7782-49-2	0.210 J	0.0453	0.453		2
06142	Silver	7440-22-4	0.0532 J	0.0136	0.113		2
06145	Thallium	7440-28-0	0.434	0.0340	0.113		2
06148	Vanadium	7440-62-2	46.6	0.0257	0.117		2
06149	Zinc	7440-66-6	74.8	0.634	3.40		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.109		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1	0.94	1.2		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.6 U	10.6	35.3		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.3	0.24	1.2		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	478	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.08	0.0100	0.0100		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL101 SDG#: DE051-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	15.1	0.50	0.50	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 03:25	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 13:24	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 05:48	John W Perkins	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110040016A	01/05/2011 16:38	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 18:37	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 06:30	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	110040016A	01/05/2011 09:45	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL101 SDG#: DE051-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/11/2011 13:19	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:02	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:02	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:23	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 12:40	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 21:42	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 19:46	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.0 U	7.0	8.4		0.84
06192	Benzene	71-43-2	0.10 U	0.10	4.2		0.84
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.2		0.84
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.2		0.84
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.2		0.84
06192	Bromoform	75-25-2	0.42 U	0.42	4.2		0.84
06192	Bromomethane	74-83-9	0.26 U	0.26	4.2		0.84
06192	2-Butanone	78-93-3	1.3 U	1.3	8.4		0.84
06192	n-Butylbenzene	104-51-8	0.13 U	0.13	4.2		0.84
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.2		0.84
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.2		0.84
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.2		0.84
06192	Chlorobenzene	108-90-7	0.12 U	0.12	4.2		0.84
06192	Chloroethane	75-00-3	0.14 U	0.14	4.2		0.84
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.2		0.84
06192	Chloroform	67-66-3	0.13 U	0.13	4.2		0.84
06192	Chloromethane	74-87-3	0.34 U	0.34	4.2		0.84
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.2		0.84
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.2		0.84
06192	Chlorotrifluoroethene	79-38-9	0.52 U	0.52	5.2		0.84
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73 U	0.73	4.2		0.84
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.2		0.84
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.2		0.84
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.2		0.84
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.2		0.84
06192	1,3-Dichlorobenzene	541-73-1	0.13 U	0.13	4.2		0.84
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.2		0.84
06192	Dichlorodifluoromethane	75-71-8	0.13 U	0.13	4.2		0.84
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.2		0.84
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.2		0.84
06192	1,1-Dichloroethene	75-35-4	0.41 U	0.41	4.2		0.84
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.2		0.84
06192	trans-1,2-Dichloroethene	156-60-5	0.13 U	0.13	4.2		0.84
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.2		0.84
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.2		0.84
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.2		0.84
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.2		0.84
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.2		0.84
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.2		0.84
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.2		0.84
06192	Freon 113	76-13-1	0.12 U	0.12	4.2		0.84
06192	Freon 133a	75-88-7	0.52 U	0.52	5.2		0.84
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.2		0.84
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.4		0.84
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.2		0.84
06192	p-Isopropyltoluene	99-87-6	0.12 U	0.12	4.2		0.84
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.2		0.84
06192	4-Methyl-2-pentanone	108-10-1	0.41 U	0.41	8.4		0.84
06192	Methylene Chloride	75-09-2	0.44 J	0.25	4.2		0.84
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.2		0.84

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.2		0.84
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12 U	0.12	4.2		0.84
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.2		0.84
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.2		0.84
06192	Toluene	108-88-3	0.15 J	0.08	4.2		0.84
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.2		0.84
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.2		0.84
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.2		0.84
06192	1,1,2-Trichloroethane	79-00-5	0.28 U	0.28	4.2		0.84
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.2		0.84
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.2		0.84
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.2		0.84
06192	1,2,4-Trimethylbenzene	95-63-6	0.42 U	0.42	4.2		0.84
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.2		0.84
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.2		0.84
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.2		0.84
06192	o-Xylene	95-47-6	0.18 U	0.18	4.2		0.84
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.3 U	5.3	16		21.55
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	369	103	207		5
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U 210	620		1
04688	Benzidine	92-87-5	1,400	U 1,400	4,100		1
04688	Benzoic acid	65-85-0	210	U 210	620		1
04688	Benzyl alcohol	100-51-6	210	U 210	620		1
04688	4-Bromophenyl-phenylether	101-55-3	21	U 21	210		1
04688	Carbazole	86-74-8	21	U 21	210		1
04688	4-Chloro-3-methylphenol	59-50-7	41	U 41	210		1
04688	4-Chloroaniline	106-47-8	83	U 83	210		1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U 21	210		1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U 21	210		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U 21	210		1
04688	2-Chloronaphthalene	91-58-7	21	U 21	210		1
04688	2-Chlorophenol	95-57-8	21	U 21	210		1
04688	4-Chlorophenyl-phenylether	7005-72-3	41	U 41	210		1
04688	Dibenzofuran	132-64-9	21	U 21	210		1
04688	1,2-Dichlorobenzene	95-50-1	21	U 21	210		1
04688	1,3-Dichlorobenzene	541-73-1	21	U 21	210		1
04688	1,4-Dichlorobenzene	106-46-7	21	U 21	210		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	410		1
04688	2,4-Dichlorophenol	120-83-2	21	U 21	210		1
04688	2,4-Dimethylphenol	105-67-9	41	U 41	210		1
04688	3,5-Dimethylphenol	108-68-9	41	U 41	210		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U 210	620		1
04688	2,4-Dinitrophenol	51-28-5	830	U 830	2,500		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	41	U 41	210		1
04688	2,6-Dinitrotoluene	606-20-2	21	U 21	210		1
04688	1,2-Diphenylhydrazine	122-66-7	21	U 21	210		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	22	J 21	410		1
04688	Hexachlorobenzene	118-74-1	21	U 21	210		1
04688	Hexachlorobutadiene	87-68-3	83	U 83	210		1
04688	Hexachlorocyclopentadiene	77-47-4	210	U 210	620		1
04688	Hexachloroethane	67-72-1	21	U 21	210		1
04688	Isophorone	78-59-1	21	U 21	210		1
04688	2-Methylphenol	95-48-7	41	U 41	210		1
04688	4-Methylphenol	106-44-5	41	U 41	210		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U 21	210		1
04688	3-Nitroaniline	99-09-2	41	U 41	210		1
04688	4-Nitroaniline	100-01-6	83	U 83	210		1
04688	Nitrobenzene	98-95-3	21	U 21	210		1
04688	2-Nitrophenol	88-75-5	21	U 21	210		1
04688	4-Nitrophenol	100-02-7	210	U 210	620		1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U 21	210		1
04688	N-Nitrosodiphenylamine	86-30-6	21	U 21	210		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	210	U 210	620		1
04688	Phenol	108-95-2	21	U 21	210		1
04688	1,2,4-Trichlorobenzene	120-82-1	21	U 21	210		1
04688	2,4,5-Trichlorophenol	95-95-4	41	U 41	210		1
04688	2,4,6-Trichlorophenol	88-06-2	41	U 41	210		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	4.8	0.83	2.1		1
10138	Acenaphthylene	208-96-8	0.41	U 0.41	2.1		1
10138	Anthracene	120-12-7	6.5	0.41	2.1		1
10138	Benzo(a)anthracene	56-55-3	13	0.83	2.1		1
10138	Benzo(a)pyrene	50-32-8	11	0.83	2.1		1
10138	Benzo(b)fluoranthene	205-99-2	13	0.83	2.1		1
10138	Benzo(g,h,i)perylene	191-24-2	2.7	0.83	2.1		1
10138	Benzo(k)fluoranthene	207-08-9	8.2	0.83	2.1		1
10138	Butylbenzylphthalate	85-68-7	7.4	U 7.4	22		1
10138	Di-n-butylphthalate	84-74-2	8.4	J 7.4	22		1
10138	Chrysene	218-01-9	14	0.41	2.1		1
10138	Dibenz(a,h)anthracene	53-70-3	0.98	J 0.83	2.1		1
10138	Diethylphthalate	84-66-2	11	J 7.4	22		1
10138	Dimethylphthalate	131-11-3	7.4	U 7.4	22		1
10138	Fluoranthene	206-44-0	28	0.83	2.1		1
10138	Fluorene	86-73-7	3.3	0.83	2.1		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.1	0.83	2.1		1

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Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	1-Methylnaphthalene	90-12-0	0.83 U	0.83	2.1		1
10138	2-Methylnaphthalene	91-57-6	0.95 J	0.83	2.1		1
10138	Naphthalene	91-20-3	2.1 J	0.83	2.1		1
10138	N-Nitrosodimethylamine	62-75-9	0.83 U	0.83	2.1		1
10138	Di-n-octylphthalate	117-84-0	7.4 U	7.4	22		1
10138	Phenanthrene	85-01-8	27	0.83	2.1		1
10138	Pyrene	129-00-0	25	0.83	2.1		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.0		20.7
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	93	U 93	190	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	62	U 62	190	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U 120	370	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U 120	370	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	62	U 62	190	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	62	U 62	190	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	62	U 62	190	1000000 0	1
10132	HMX	2691-41-0	190	U 190	470	1000000 0	1
10132	Nitrobenzene	98-95-3	62	U 62	190	1000000 0	1
10132	Nitroglycerin	55-63-0	1,200	U 1,200	3,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	120	U 120	190	1000000 0	1
10132	3-Nitrotoluene	99-08-1	160	U 160	190	1000000 0	1
10132	4-Nitrotoluene	99-99-0	120	U 120	190	1000000 0	1
10132	PETN	78-11-5	1,200	U 1,200	3,700	1000000 0	1
10132	RDX	121-82-4	78	U 78	190	1000000 0	1
10132	Tetryl	479-45-8	95	U 95	190	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	62	U 62	190	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	62	U 62	190	1000000 0	1

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Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.5 U	1.5	4.5		1
10401	Dalapon	75-99-0	5.5 U	5.5	11		1
10401	2,4-DB	94-82-6	1.1 U	1.1	2.1		1
10401	Dicamba	1918-00-9	3.1	0.50	1.5		1
10401	Dinoseb	88-85-7	0.99 U	0.99	3.0		1
10401	2,4-DP (Dichlorprop)	120-36-5	2.0 J	0.99	2.1		1
10401	MCPA	94-74-6	240 J	94	310		1
10401	MCPP (Mecoprop)	93-65-2	93 U	93	310		1
10401	2,4,5-T	93-76-5	0.10 U	0.10	0.21		1
10401	2,4,5-TP	93-72-1	0.36 U	0.36	0.36		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for 2,4-DB.

Due to interfering peaks on the chromatogram, the values reported for 2,4,5-TP and 2,4-DB represent the lowest reporting limits attainable.

HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by	8315A 50-00-0	740 U	740	1,900		1

Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.082 U	0.082	0.21		1
01363	Alpha BHC	319-84-6	0.042 U	0.042	0.21		1
01363	Beta BHC	319-85-7	0.074 U	0.074	0.21		1
01363	Gamma BHC - Lindane	58-89-9	0.042 U	0.042	0.21		1
01363	Chlordane	57-74-9	0.99 U	0.99	4.2		1
01363	p,p-DDD	72-54-8	0.082 U	0.082	0.42		1
01363	p,p-DDE	72-55-9	0.082 U	0.082	0.42		1
01363	p,p-DDT	50-29-3	0.10 J	0.082	0.42		1
01363	Delta BHC	319-86-8	0.045 U	0.045	0.21		1
01363	Dieldrin	60-57-1	0.082 U	0.082	0.42		1
01363	Endosulfan I	959-98-8	0.055 U	0.055	0.21		1
01363	Endosulfan II	33213-65-9	0.082 U	0.082	0.42		1
01363	Endosulfan Sulfate	1031-07-8	0.082 U	0.082	0.42		1
01363	Endrin	72-20-8	0.082 U	0.082	0.42		1
01363	Endrin Aldehyde	7421-93-4	0.082 U	0.082	0.42		1
01363	Endrin Ketone	53494-70-5	0.082 U	0.082	0.42		1
01363	Heptachlor	76-44-8	0.074 U	0.074	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.042 U	0.042	0.21		1
01363	Methoxychlor	72-43-5	0.42 U	0.42	2.1		1
01363	Mirex	2385-85-5	0.13 J	0.082	0.42		1
01363	Toxaphene	8001-35-2	2.7 U	2.7	8.2		1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	4.1		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	4.1		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	4.1		1
10225	PCB-1016	12674-11-2	0.41 U	0.41	2.1		1
10225	PCB-1221	11104-28-2	0.62 U	0.62	2.1		1
10225	PCB-1232	11141-16-5	0.65 U	0.65	2.1		1
10225	PCB-1242	53469-21-9	0.62 U	0.62	2.1		1
10225	PCB-1248	12672-29-6	0.41 U	0.41	2.1		1
10225	PCB-1254	11097-69-1	0.41 U	0.41	2.1		1
10225	PCB-1260	11096-82-5	0.41 U	0.41	2.1		1
10225	PCB-1262	37324-23-5	0.41 U	0.41	2.1		1
10225	PCB-1268	11100-14-4	0.41 U	0.41	2.1		1
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.50 U	0.50	1.5		1
10199	EFH (C15-C20)	n.a.	0.72 J	0.50	1.5		1
10199	EFH (C21-C30)	n.a.	8.7	0.50	1.5		1
10199	EFH (C30 - C40)	n.a.	40	0.50	1.5		1
10199	EFH (C8-C11)	n.a.	0.50 U	0.50	1.5		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120 U	120	620		1
10501	Isopropanol	67-63-0	120 U	120	620		1
10501	Methanol	67-56-1	120 U	120	620		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	6.2 U	6.2	16		1
08283	Ethylene glycol	107-21-1	6.2 U	6.2	16		1
08283	Propylene glycol	57-55-6	6.2 U	6.2	16		1
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.9 U	1.9	4.3		1
10318	o-Terphenyl	84-15-1	1.9 U	1.9	4.3		1
10318	p-Terphenyl	92-94-4	1.9 U	1.9	4.3		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	25,200	6.18	24.6		1
07914	Boron	7440-42-8	11.4	1.09	6.14		1
01650	Calcium	7440-70-2	71,800	37.7	123		5
01654	Iron	7439-89-6	28,500	5.79	24.6		1
01656	Lithium	7439-93-2	24.2	0.27	2.5		1
01657	Magnesium	7439-95-4	7,560	3.12	12.3		1
06958	Manganese	7439-96-5	357	0.0958	0.614		1
10145	Phosphorus	7723-14-0	640	0.688	12.3		1
01662	Potassium	7440-09-7	5,740	22.1	61.4		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01667	Sodium	7440-23-5	129	45.8	123		1
07968	Strontium	7440-24-6	114	0.0762	0.614		1
06969	Tin	7440-31-5	2.05 J	1.23	12.3		1
06970	Titanium	7440-32-6	1,240	0.467	1.23		1
10146	Zirconium	7440-67-7	2.97 J	1.03	6.14		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.189 J	0.0744	0.248		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.75	0.0744	0.496		2
06126	Barium	7440-39-3	115	0.134	0.496		2
06127	Beryllium	7440-41-7	0.723	0.0199	0.124		2
06128	Cadmium	7440-43-9	0.360	0.0447	0.124		2
06131	Chromium	7440-47-3	31.5	0.149	0.496		2
06132	Cobalt	7440-48-4	8.52	0.0248	0.124		2
06133	Copper	7440-50-8	13.6	0.0819	0.496		2
06135	Lead	7439-92-1	9.53	0.0129	0.248		2
06138	Molybdenum	7439-98-7	0.527	0.0620	0.124		2
06139	Nickel	7440-02-0	18.0	0.124	0.496		2
06141	Selenium	7782-49-2	0.296 J	0.0496	0.496		2
06142	Silver	7440-22-4	0.0309 J	0.0149	0.124		2
06145	Thallium	7440-28-0	0.344	0.0372	0.124		2
06148	Vanadium	7440-62-2	60.6	0.0273	0.124		2
06149	Zinc	7440-66-6	77.6	0.695	3.72		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0034 U	0.0034	0.120		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.9	0.99	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.99 U	0.99	1.9		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.2 U	11.2	37.2		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.33 J	0.25	1.2		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.22 U	0.22	0.62		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	440	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.19	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	19.4	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010 16:24	Chelsea B Eastep	0.84
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010 10:11	Jason M Long	21.55
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:18	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010 17:15	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/20/2011 15:38	Timothy J Trees	5
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 03:59	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 13:55	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10357A34B	12/27/2010 19:05	Carrie E Miller	20.7
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:14	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103650008A	01/06/2011 03:49	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103610005A	12/29/2010 19:08	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 06:15	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 18:51	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 06:48	Lindsey K Lafferty	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL117 SDG#: DE051-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103610005A	12/27/2010 15:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103650008A	01/03/2011 16:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 18:56	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103630030A	12/29/2010 22:48	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103630032A	12/29/2010 20:41	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103640012A	01/05/2011 08:05	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103640012A	12/31/2010 00:30	David V Hershey Jr	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103630032A	12/29/2010 17:00	Tyler O Griffin	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103630030A	12/29/2010 17:00	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
01650	Calcium	SW-846 6010B	2	103645708002	12/31/2010 17:18	John P Hook	5
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:05	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06133	Copper	SW-846 6020	2	110101026002A	01/12/2011 09:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:05	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:05	Choon Y Tian	2

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL117 SDG#: DE051-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:37	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:24	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 12:54	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11013013201A	01/14/2011 12:54	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 22:05	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 19:59	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	11004102201A	01/04/2011 19:04	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11004102201A	01/04/2011 09:15	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.8 U	6.8	8.1		0.86
06192	Benzene	71-43-2	0.10 U	0.10	4.0		0.86
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.0		0.86
06192	Bromochloromethane	74-97-5	0.33 U	0.33	4.0		0.86
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.0		0.86
06192	Bromoform	75-25-2	0.40 U	0.40	4.0		0.86
06192	Bromomethane	74-83-9	0.25 U	0.25	4.0		0.86
06192	2-Butanone	78-93-3	1.2 U	1.2	8.1		0.86
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.0		0.86
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.0		0.86
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.0		0.86
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.0		0.86
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.0		0.86
06192	Chloroethane	75-00-3	0.13 U	0.13	4.0		0.86
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30 U	0.30	4.0		0.86
06192	Chloroform	67-66-3	0.12 U	0.12	4.0		0.86
06192	Chloromethane	74-87-3	0.33 U	0.33	4.0		0.86
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.0		0.86
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.0		0.86
06192	Chlorotrifluoroethene	79-38-9	0.51 U	0.51	5.1		0.86
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.71 U	0.71	4.0		0.86
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	4.0		0.86
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	4.0		0.86
06192	Dibromomethane	74-95-3	0.24 U	0.24	4.0		0.86
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.0		0.86
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.0		0.86
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.0		0.86
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.0		0.86
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.0		0.86
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.0		0.86
06192	1,1-Dichloroethene	75-35-4	0.39 U	0.39	4.0		0.86
06192	cis-1,2-Dichloroethene	156-59-2	0.19 U	0.19	4.0		0.86
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.0		0.86
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	4.0		0.86
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.0		0.86
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	4.0		0.86
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.0		0.86
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.0		0.86
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	4.0		0.86
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.0		0.86
06192	Freon 113	76-13-1	0.11 U	0.11	4.0		0.86
06192	Freon 133a	75-88-7	0.51 U	0.51	5.1		0.86
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.0		0.86
06192	2-Hexanone	591-78-6	1.6 U	1.6	8.1		0.86
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.0		0.86
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.0		0.86
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	4.0		0.86
06192	4-Methyl-2-pentanone	108-10-1	0.39 U	0.39	8.1		0.86
06192	Methylene Chloride	75-09-2	0.43 J	0.24	4.0		0.86
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.0		0.86

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.0		0.86
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.0		0.86
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23 U	0.23	4.0		0.86
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	4.0		0.86
06192	Toluene	108-88-3	0.11 J	0.08	4.0		0.86
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.0		0.86
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	4.0		0.86
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	4.0		0.86
06192	1,1,2-Trichloroethane	79-00-5	0.27 U	0.27	4.0		0.86
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.0		0.86
06192	Trichlorofluoromethane	75-69-4	0.29 U	0.29	4.0		0.86
06192	1,2,3-Trichloropropane	96-18-4	0.33 U	0.33	4.0		0.86
06192	1,2,4-Trimethylbenzene	95-63-6	0.40 U	0.40	4.0		0.86
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.0		0.86
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	4.0		0.86
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	4.0		0.86
06192	o-Xylene	95-47-6	0.17 U	0.17	4.0		0.86
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.9 U	4.9	15		20.76
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	98.3 U	98.3	197		5
Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.							
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	590		1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900		1
04688	Benzoic acid	65-85-0	200	U 200	590		1
04688	Benzyl alcohol	100-51-6	200	U 200	590		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200		1
04688	Carbazole	86-74-8	20	U 20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	200		1
04688	4-Chloroaniline	106-47-8	79	U 79	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200		1
04688	2-Chlorophenol	95-57-8	20	U 20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	200		1
04688	Dibenzofuran	132-64-9	20	U 20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	200		1

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Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	3,5-Dimethylphenol	108-68-9	39	U 39	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	590		1
04688	2,4-Dinitrophenol	51-28-5	790	U 790	2,400		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J 20	390		1
04688	Hexachlorobenzene	118-74-1	20	U 20	200		1
04688	Hexachlorobutadiene	87-68-3	79	U 79	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	590		1
04688	Hexachloroethane	67-72-1	20	U 20	200		1
04688	Isophorone	78-59-1	20	U 20	200		1
04688	2-Methylphenol	95-48-7	39	U 39	200		1
04688	4-Methylphenol	106-44-5	39	U 39	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U 20	200		1
04688	3-Nitroaniline	99-09-2	39	U 39	200		1
04688	4-Nitroaniline	100-01-6	79	U 79	200		1
04688	Nitrobenzene	98-95-3	20	U 20	200		1
04688	2-Nitrophenol	88-75-5	20	U 20	200		1
04688	4-Nitrophenol	100-02-7	200	U 200	590		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U 200	590		1
04688	Phenol	108-95-2	20	U 20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U 20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	200		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	200		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.79	U 0.79	2.0		1
10138	Acenaphthylene	208-96-8	0.39	U 0.39	2.0		1
10138	Anthracene	120-12-7	0.39	U 0.39	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.79	U 0.79	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.79	U 0.79	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	1.3	J 0.79	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	1.0	J 0.79	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.79	U 0.79	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.1	U 7.1	21		1
10138	Di-n-butylphthalate	84-74-2	11	J 7.1	21		1
10138	Chrysene	218-01-9	1.0	J 0.39	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.79	U 0.79	2.0		1
10138	Diethylphthalate	84-66-2	7.4	J 7.1	21		1
10138	Dimethylphthalate	131-11-3	7.1	U 7.1	21		1

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Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	Fluoranthene	206-44-0	0.79 U	0.79	2.0		1
10138	Fluorene	86-73-7	0.79 U	0.79	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.79 U	0.79	2.0		1
10138	1-Methylnaphthalene	90-12-0	0.79 U	0.79	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.79 U	0.79	2.0		1
10138	Naphthalene	91-20-3	0.79 U	0.79	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.79 U	0.79	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.1 U	7.1	21		1
10138	Phenanthrene	85-01-8	0.79 U	0.79	2.0		1
10138	Pyrene	129-00-0	0.79 U	0.79	2.0		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1		20.36
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	88 U	88	180	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	59 U	59	180	1000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120 U	120	350	1000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120 U	120	350	1000000	1
10132	1,3-Dinitrobenzene	99-65-0	59 U	59	180	1000000	1
10132	2,4-Dinitrotoluene	121-14-2	59 U	59	180	1000000	1
10132	2,6-Dinitrotoluene	606-20-2	59 U	59	180	1000000	1
10132	HMX	2691-41-0	150 U	150	440	1000000	1
10132	Nitrobenzene	98-95-3	59 U	59	180	1000000	1
10132	Nitroglycerin	55-63-0	1,200 U	1,200	3,500	1000000	1
10132	2-Nitrotoluene	88-72-2	120 U	120	180	1000000	1
10132	3-Nitrotoluene	99-08-1	150 U	150	180	1000000	1
10132	4-Nitrotoluene	99-99-0	120 U	120	180	1000000	1
10132	PETN	78-11-5	1,200 U	1,200	3,500	1000000	1
10132	RDX	121-82-4	74 U	74	180	1000000	1
10132	Tetryl	479-45-8	90 U	90	180	1000000	1

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SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	59	U 59	180	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	59	U 59	180	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U 1.4	4.2		1
10401	Dalapon	75-99-0	5.2	U 5.2	11		1
10401	2,4-DB	94-82-6	7.9	U 7.9	7.9		1
10401	Dicamba	1918-00-9	0.47	U 0.47	1.4		1
10401	Dinoseb	88-85-7	0.94	U 0.94	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	1.7	U 1.7	2.0		1
10401	MCPA	94-74-6	110	J 90	290		1
10401	MCPP (Mecoprop)	93-65-2	390	88	290		1
10401	2,4,5-T	93-76-5	0.097	U 0.097	0.20		1
10401	2,4,5-TP	93-72-1	0.088	U 0.088	0.20		1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. 2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for 2,4-DB. Due to interfering peaks on the chromatogram, the values reported 2,4-DP and 2,4-DB represent the lowest reporting limits attainable.							
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by	50-00-0	710	U 710	1,800		1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.078	U 0.078	0.20		1
01363	Alpha BHC	319-84-6	0.040	U 0.040	0.20		1
01363	Beta BHC	319-85-7	0.071	U 0.071	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.040	U 0.040	0.20		1
01363	Chlordane	57-74-9	0.94	U 0.94	4.0		1
01363	p,p-DDD	72-54-8	0.078	U 0.078	0.40		1
01363	p,p-DDE	72-55-9	0.078	U 0.078	0.40		1
01363	p,p-DDT	50-29-3	0.29	U 0.29	0.40		1
01363	Delta BHC	319-86-8	0.042	U 0.042	0.20		1
01363	Dieldrin	60-57-1	0.078	U 0.078	0.40		1
01363	Endosulfan I	959-98-8	0.052	U 0.052	0.20		1
01363	Endosulfan II	33213-65-9	0.078	U 0.078	0.40		1
01363	Endosulfan Sulfate	1031-07-8	0.078	U 0.078	0.40		1
01363	Endrin	72-20-8	0.078	U 0.078	0.40		1
01363	Endrin Aldehyde	7421-93-4	0.078	U 0.078	0.40		1
01363	Endrin Ketone	53494-70-5	0.078	U 0.078	0.40		1
01363	Heptachlor	76-44-8	0.071	U 0.071	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.040	U 0.040	0.20		1

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SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg		ug/kg	ug/kg	ug/kg	
01363	Methoxychlor	72-43-5	0.40	U	0.40	2.0		1
01363	Mirex	2385-85-5	0.14	U	0.14	0.40		1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.8		1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.								
Pesticides/PCBs		SW-846 8082	ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9		1
10225	Aroclor 5460	11126-42-4	2.5	J	1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39	U	0.39	2.0		1
10225	PCB-1221	11104-28-2	0.59	U	0.59	2.0		1
10225	PCB-1232	11141-16-5	0.61	U	0.61	2.0		1
10225	PCB-1242	53469-21-9	0.59	U	0.59	2.0		1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0		1
10225	PCB-1254	11097-69-1	0.79	J	0.39	2.0		1
10225	PCB-1260	11096-82-5	1.0	J	0.39	2.0		1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0		1
GC Extractable TPH		SW-846 8015B modified	mg/kg		mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.47	U	0.47	1.4		1
10199	EFH (C15-C20)	n.a.	0.80	J	0.47	1.4		1
10199	EFH (C21-C30)	n.a.	7.5		0.47	1.4		1
10199	EFH (C30 - C40)	n.a.	32		0.47	1.4		1
10199	EFH (C8-C11)	n.a.	0.47	U	0.47	1.4		1
GC Miscellaneous		SW-846 8015B	ug/kg		ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120	U	120	590		1
10501	Isopropanol	67-63-0	120	U	120	590		1
10501	Methanol	67-56-1	120	U	120	590		1
GC Miscellaneous		SW-846 8015B modified	mg/kg		mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.9	U	5.9	15		1
08283	Ethylene glycol	107-21-1	13	U	13	15		1
08283	Propylene glycol	57-55-6	5.9	U	5.9	15		1
Reporting limits were raised due to interference from the sample matrix.								
Terphenyls		SW-846 8015B	mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.8	U	1.8	4.1		1
10318	o-Terphenyl	84-15-1	1.8	U	1.8	4.1		1
10318	p-Terphenyl	92-94-4	1.8	U	1.8	4.1		1

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SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/23/2010 11:20

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SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,100	5.87	23.4		1
07914	Boron	7440-42-8	5.79 J	1.04	5.84		1
01650	Calcium	7440-70-2	22,300	7.16	23.4		1
01654	Iron	7439-89-6	12,400	5.50	23.4		1
01656	Lithium	7439-93-2	11.2	0.26	2.3		1
01657	Magnesium	7439-95-4	3,230	2.97	11.7		1
06958	Manganese	7439-96-5	156	0.0911	0.584		1
10145	Phosphorus	7723-14-0	391	0.654	11.7		1
01662	Potassium	7440-09-7	2,470	21.0	58.4		1
01667	Sodium	7440-23-5	72.7 J	43.6	117		1
07968	Strontium	7440-24-6	46.2	0.0724	0.584		1
06969	Tin	7440-31-5	1.61 J	1.17	11.7		1
06970	Titanium	7440-32-6	615	0.444	1.17		1
10146	Zirconium	7440-67-7	1.94 J	0.981	5.84		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.128 J	0.0687	0.229		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.18	0.0687	0.458		2
06126	Barium	7440-39-3	122	0.124	0.458		2
06127	Beryllium	7440-41-7	0.624	0.0183	0.114		2
06128	Cadmium	7440-43-9	0.254	0.0412	0.114		2
06131	Chromium	7440-47-3	28.6	0.137	0.458		2
06132	Cobalt	7440-48-4	8.64	0.0229	0.114		2
06133	Copper	7440-50-8	12.9	0.0771	0.467		2
06135	Lead	7439-92-1	9.56	0.0119	0.229		2
06138	Molybdenum	7439-98-7	0.502	0.0572	0.114		2
06139	Nickel	7440-02-0	17.3	0.114	0.458		2
06141	Selenium	7782-49-2	0.265 J	0.0458	0.458		2
06142	Silver	7440-22-4	0.0300 J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.295	0.0343	0.114		2
06148	Vanadium	7440-62-2	54.1	0.0257	0.117		2
06149	Zinc	7440-66-6	71.2	0.641	3.43		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.110		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8	0.94	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.94 U	0.94	1.8		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.6 U	10.6	35.4		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.44 J	0.24	1.2	mg/kg	1
SW-846 9012B							
05895	21a Cyanide by 9012B	57-12-5	0.21 U	0.21	0.58	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	441	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	7.90	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	15.2	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010 16:46	Chelsea B Eastep	0.86
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010 10:31	Jason M Long	20.76
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:25	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010 17:22	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011 17:17	Timothy J Trees	5
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 04:34	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 14:27	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL118 SDG#: DE051-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10357A34B	12/27/2010 19:41	Carrie E Miller	20.36
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:21	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103650008A	01/06/2011 05:56	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103610005A	12/29/2010 19:17	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 07:37	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 19:05	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 07:07	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103610005A	12/27/2010 15:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103650008A	01/03/2011 16:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 23:05	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103630030A	12/29/2010 23:03	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103630032A	12/29/2010 20:57	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103640012A	01/05/2011 11:49	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103640012A	12/31/2010 00:30	David V Hershey Jr	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103630032A	12/29/2010 17:00	Tyler O Griffin	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103630030A	12/29/2010 17:00	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL118 SDG#: DE051-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:08	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/11/2011 13:22	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06133	Copper	SW-846 6020	2	110101026002A	01/12/2011 09:39	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:08	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:08	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:39	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:25	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 13:51	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11013013201B	01/14/2011 13:51	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11017017201A	01/18/2011 11:08	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 20:11	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	2	11004102201A	01/04/2011 19:07	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11017017201A	01/17/2011 12:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11004102201A	01/04/2011 09:15	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	770	U 770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	20	J 19	390		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	39	U 39	190		1
04688	4-Methylphenol	106-44-5	39	U 39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	39	U 39	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	580		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77	U 0.77	1.9		1
10138	Acenaphthylene	208-96-8	0.39	U 0.39	1.9		1
10138	Anthracene	120-12-7	0.81	J 0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	7.0	0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	6.1	0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	9.2	0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	3.0	0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	3.6	0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	7.0	U 7.0	21		1
10138	Di-n-butylphthalate	84-74-2	10	J 7.0	21		1
10138	Chrysene	218-01-9	6.8	0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	J 0.77	1.9		1
10138	Diethylphthalate	84-66-2	7.0	U 7.0	21		1
10138	Dimethylphthalate	131-11-3	7.0	U 7.0	21		1
10138	Fluoranthene	206-44-0	12	0.77	1.9		1
10138	Fluorene	86-73-7	0.77	U 0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.6	0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.77	U 0.77	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.77	U 0.77	1.9		1
10138	Naphthalene	91-20-3	0.77	U 0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U 0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	7.0	U 7.0	21		1
10138	Phenanthrene	85-01-8	3.5	0.77	1.9		1
10138	Pyrene	129-00-0	12	0.77	1.9		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U 1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U 5.1	10		1
10401	2,4-DB	94-82-6	1.0	U 1.0	2.0		1
10401	Dicamba	1918-00-9	2.3	U 2.3	2.3		1
10401	Dinoseb	88-85-7	0.93	U 0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93	U 0.93	2.0		1
10401	MCPA	94-74-6	88	U 88	290		1
10401	MCPP (Mecoprop)	93-65-2	87	U 87	290		1
10401	2,4,5-T	93-76-5	0.12	J 0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087	U 0.087	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
2,4-DB.							
Due to interfering peaks on the chromatogram, the values reported for dicamba and 2,4-DB represent the lowest reporting limits attainable.							
Pesticides/PCBs							
	SW-846 8081A		ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.077 U	0.077	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.070 U	0.070	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	0.93 U	0.93	3.9		1
01363	p,p-DDD	72-54-8	0.077 U	0.077	0.39		1
01363	p,p-DDE	72-55-9	0.077 U	0.077	0.39		1
01363	p,p-DDT	50-29-3	0.077 U	0.077	0.39		1
01363	Delta BHC	319-86-8	0.042 U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.077 U	0.077	0.39		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.077 U	0.077	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.077 U	0.077	0.39		1
01363	Endrin	72-20-8	0.077 U	0.077	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.077 U	0.077	0.39		1
01363	Endrin Ketone	53494-70-5	0.077 U	0.077	0.39		1
01363	Heptachlor	76-44-8	0.070 U	0.070	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.077 U	0.077	0.39		1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.7		1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs							
	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.58 U	0.58	2.0		1
10225	PCB-1232	11141-16-5	0.60 U	0.60	2.0		1
10225	PCB-1242	53469-21-9	0.58 U	0.58	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	0.38 U	0.38	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,500	5.73	22.8		1
07914	Boron	7440-42-8	5.13 J	1.01	5.69		1
01650	Calcium	7440-70-2	5,190	6.98	22.8		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	21,000	5.36	22.8		1
01656	Lithium	7439-93-2	23.0	0.25	2.3		1
01657	Magnesium	7439-95-4	4,940	2.89	11.4		1
06958	Manganese	7439-96-5	283	0.0888	0.569		1
10145	Phosphorus	7723-14-0	423	0.638	11.4		1
01662	Potassium	7440-09-7	3,050	20.5	56.9		1
01667	Sodium	7440-23-5	95.5 J	42.5	114		1
07968	Strontium	7440-24-6	25.6	0.0706	0.569		1
06969	Tin	7440-31-5	2.26 J	1.14	11.4		1
06970	Titanium	7440-32-6	1,130	0.433	1.14		1
10146	Zirconium	7440-67-7	3.01 J	0.956	5.69		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.120 J	0.0683	0.228		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.21	0.0683	0.455		2
06126	Barium	7440-39-3	102	0.123	0.455		2
06127	Beryllium	7440-41-7	0.404	0.0182	0.114		2
06128	Cadmium	7440-43-9	0.121	0.0410	0.114		2
06131	Chromium	7440-47-3	14.9	0.137	0.455		2
06132	Cobalt	7440-48-4	5.29	0.0228	0.114		2
06133	Copper	7440-50-8	13.5	0.0767	0.465		2
06135	Lead	7439-92-1	5.00	0.0118	0.228		2
06138	Molybdenum	7439-98-7	0.447	0.0569	0.114		2
06139	Nickel	7440-02-0	10.4	0.114	0.455		2
06141	Selenium	7782-49-2	0.127 J	0.0455	0.455		2
06142	Silver	7440-22-4	0.0305 J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.243	0.0342	0.114		2
06148	Vanadium	7440-62-2	48.4	0.0256	0.116		2
06149	Zinc	7440-66-6	57.2	0.638	3.42		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0161 J	0.0031	0.109		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.5	0.93	1.2		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.5 U	10.5	34.8		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.30 J	0.23	1.2		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	459	10.0	10.0		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.70	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 00:31	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 10:44	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	103645708002	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 03:31	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 19:20	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 07:25	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1

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Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:17	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 13:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:17	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:26	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 13:08	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/14/2011 22:51	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11017243201A	01/20/2011 20:17	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,800	19	190		1
04688	Acenaphthylene	208-96-8	1,900	19	190		1
04688	Aniline	62-53-3	1,200	190	580		1
04688	Anthracene	120-12-7	1,900	19	190		1
04688	Benziidine	92-87-5	3,700	J 1,400	3,900		1
04688	Benzo(a)anthracene	56-55-3	1,900	19	190		1
04688	Benzo(a)pyrene	50-32-8	1,700	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,700	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,500	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800	19	190		1
04688	Benzoic acid	65-85-0	1,900	190	580		1
04688	Benzyl alcohol	100-51-6	1,800	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	1,800	19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,900	19	190		1
04688	Carbazole	86-74-8	1,900	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	1,900	39	190		1
04688	4-Chloroaniline	106-47-8	1,100	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,900	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,600	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,700	19	190		1
04688	2-Chloronaphthalene	91-58-7	1,600	19	190		1
04688	2-Chlorophenol	95-57-8	1,900	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900	39	190		1
04688	Chrysene	218-01-9	1,800	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,600	19	190		1
04688	Dibenzofuran	132-64-9	1,900	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,600	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,500	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,500	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,400	120	390		1
04688	2,4-Dichlorophenol	120-83-2	1,900	19	190		1
04688	Diethylphthalate	84-66-2	1,800	19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,900	39	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000	39	190		1
04688	Dimethylphthalate	131-11-3	1,800	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,500	190	580		1
04688	2,4-Dinitrophenol	51-28-5	2,800	770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	1,900	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,900	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	2,100	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	19	390		1
04688	Fluoranthene	206-44-0	1,900	19	190		1
04688	Fluorene	86-73-7	1,900	19	190		1
04688	Hexachlorobenzene	118-74-1	1,900	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,800	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,500	190	580		1
04688	Hexachloroethane	67-72-1	1,600	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,700	19	190		1
04688	2-Methylphenol	95-48-7	1,800	39	190		1
04688	4-Methylphenol	106-44-5	1,800	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,000	19	190		1
04688	3-Nitroaniline	99-09-2	1,900	39	190		1
04688	4-Nitroaniline	100-01-6	1,600	77	190		1
04688	Nitrobenzene	98-95-3	1,900	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	2,100	190	580		1
04688	N-Nitrosodimethylamine	62-75-9	1,500	39	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,700	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,900	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,600	190	580		1
04688	Phenanthrene	85-01-8	1,900	19	190		1
04688	Phenol	108-95-2	1,800	19	190		1
04688	Pyrene	129-00-0	2,000	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,800	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	1,900	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	39	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	36	0.77	1.9		1
10138	Acenaphthylene	208-96-8	37	0.39	1.9		1
10138	Anthracene	120-12-7	35	0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	38	0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	36	0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	39	0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	25	0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	37	0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	42	7.0	21		1
10138	Di-n-butylphthalate	84-74-2	49	7.0	21		1
10138	Chrysene	218-01-9	35	0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	30	0.77	1.9		1
10138	Diethylphthalate	84-66-2	45	7.0	21		1
10138	Dimethylphthalate	131-11-3	41	7.0	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	41	7.0	21		1
10138	Fluoranthene	206-44-0	37	0.77	1.9		1
10138	Fluorene	86-73-7	36	0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	30	0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	35	0.77	1.9		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	2-Methylnaphthalene	91-57-6	33	0.77	1.9		1
10138	Naphthalene	91-20-3	35	0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	40	0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	40	7.0	21		1
10138	Phenanthrene	85-01-8	35	0.77	1.9		1
10138	Pyrene	129-00-0	33	0.77	1.9		1
Herbicides SW-846 8151A							
10401	2,4-D	94-75-7	12	1.4	4.2		1
10401	Dalapon	75-99-0	16	5.1	10		1
10401	2,4-DB	94-82-6	9.2	0.72	2.0		1
10401	Dicamba	1918-00-9	1.0 J	0.46	1.4		1
10401	Dinoseb	88-85-7	2.0 J	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	9.8	0.93	2.0		1
10401	MCPA	94-74-6	1,000	88	290		1
10401	MCPP (Mecoprop)	93-65-2	960	87	290		1
10401	2,4,5-T	93-76-5	0.93	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.82	0.087	0.20		1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.							
2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for 2,4-DB.							
Pesticides/PCBs SW-846 8081A							
01363	Aldrin	309-00-2	0.39	0.077	0.20		1
01363	Alpha BHC	319-84-6	0.26	0.039	0.20		1
01363	Beta BHC	319-85-7	0.27	0.070	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.29	0.039	0.20		1
01363	Chlordane	57-74-9	0.93 U	0.93	3.9		1
01363	p,p-DDD	72-54-8	0.51	0.077	0.39		1
01363	p,p-DDE	72-55-9	0.77	0.077	0.39		1
01363	p,p-DDT	50-29-3	0.58	0.077	0.39		1
01363	Delta BHC	319-86-8	0.26	0.042	0.20		1
01363	Dieldrin	60-57-1	0.52	0.077	0.39		1
01363	Endosulfan I	959-98-8	0.21	0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.62	0.077	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.70	0.077	0.39		1
01363	Endrin	72-20-8	0.53	0.077	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.46	0.077	0.39		1
01363	Endrin Ketone	53494-70-5	0.70	0.077	0.39		1
01363	Heptachlor	76-44-8	0.33	0.070	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.36	0.039	0.20		1
01363	Methoxychlor	72-43-5	3.0	0.39	1.9		1
01363	Mirex	2385-85-5	0.077 U	0.077	0.39		1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.7		1

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Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.8		1
10225	PCB-1016	12674-11-2	25	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.58 U	0.58	2.0		1
10225	PCB-1232	11141-16-5	0.60 U	0.60	2.0		1
10225	PCB-1242	53469-21-9	0.58 U	0.58	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	26	0.38	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,300	5.56	22.1		1
07914	Boron	7440-42-8	199	0.984	5.53		1
01650	Calcium	7440-70-2	4,790	6.78	22.1		1
01654	Iron	7439-89-6	28,800	5.21	22.1		1
01656	Lithium	7439-93-2	138	0.24	2.2		1
01657	Magnesium	7439-95-4	6,840	2.81	11.1		1
06958	Manganese	7439-96-5	397	0.0863	0.553		1
10145	Phosphorus	7723-14-0	583	0.619	11.1		1
01662	Potassium	7440-09-7	4,870	19.9	55.3		1
01667	Sodium	7440-23-5	1,130	41.3	111		1
07968	Strontium	7440-24-6	126	0.0686	0.553		1
06969	Tin	7440-31-5	398	1.11	11.1		1
06970	Titanium	7440-32-6	1,560	0.420	1.11		1
10146	Zirconium	7440-67-7	108	0.929	5.53		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.551	0.0683	0.228		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.18	0.0683	0.455		2
06126	Barium	7440-39-3	119	0.123	0.455		2
06127	Beryllium	7440-41-7	1.40	0.0182	0.114		2
06128	Cadmium	7440-43-9	1.37	0.0410	0.114		2
06131	Chromium	7440-47-3	27.6	0.137	0.455		2
06132	Cobalt	7440-48-4	58.9	0.0228	0.114		2
06133	Copper	7440-50-8	25.1	0.0744	0.451		2
06135	Lead	7439-92-1	9.11	0.0118	0.228		2
06138	Molybdenum	7439-98-7	12.4	0.0569	0.114		2
06139	Nickel	7440-02-0	23.8	0.114	0.455		2
06141	Selenium	7782-49-2	2.16	0.0455	0.455		2
06142	Silver	7440-22-4	12.4	0.0137	0.114		2

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Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals			SW-846 6020	mg/kg	mg/kg	mg/kg	
06145	Thallium	7440-28-0	0.724	0.0342	0.114		2
06148	Vanadium	7440-62-2	56.4	0.0248	0.113		2
06149	Zinc	7440-66-6	70.2	0.638	3.42		2
			SW-846 7471A	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.193	0.0032	0.111		1
Wet Chemistry			EPA 300.0	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.6	0.93	1.2		1
			EPA 314.0	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	503	10.5	34.8		1
			SW-846 7199	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	46.2	1.2	5.8		5
Wet Chemistry			EPA 160.3 modified	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 01:06	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 11:16	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 03:58	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 19:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 07:44	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1

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Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:40	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06133	Copper	SW-846 6020	2	110101026002A	01/12/2011 09:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 13:40	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:31	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 13:36	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/14/2011 23:37	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 20:36	Ashley M Adams	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

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Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900	19	190		1
04688	Acenaphthylene	208-96-8	1,900	19	190		1
04688	Aniline	62-53-3	1,100	190	580		1
04688	Anthracene	120-12-7	1,900	19	190		1
04688	Benziidine	92-87-5	4,800	1,400	3,900		1
04688	Benzo(a)anthracene	56-55-3	1,900	19	190		1
04688	Benzo(a)pyrene	50-32-8	1,700	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,700	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,600	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,700	19	190		1
04688	Benzoic acid	65-85-0	2,000	190	580		1
04688	Benzyl alcohol	100-51-6	1,700	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	1,800	19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,900	19	190		1
04688	Carbazole	86-74-8	1,900	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	1,900	39	190		1
04688	4-Chloroaniline	106-47-8	1,100	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,600	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,600	19	190		1
04688	2-Chloronaphthalene	91-58-7	1,600	19	190		1
04688	2-Chlorophenol	95-57-8	1,800	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900	39	190		1
04688	Chrysene	218-01-9	1,800	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,600	19	190		1
04688	Dibenzofuran	132-64-9	1,900	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,500	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,400	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,500	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,400	120	390		1
04688	2,4-Dichlorophenol	120-83-2	1,900	19	190		1
04688	Diethylphthalate	84-66-2	1,900	19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,900	39	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000	39	190		1
04688	Dimethylphthalate	131-11-3	1,800	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,500	190	580		1
04688	2,4-Dinitrophenol	51-28-5	2,800	770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	2,000	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,900	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	2,000	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	19	390		1
04688	Fluoranthene	206-44-0	1,900	19	190		1
04688	Fluorene	86-73-7	1,900	19	190		1
04688	Hexachlorobenzene	118-74-1	1,900	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,800	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,100	190	580		1
04688	Hexachloroethane	67-72-1	1,500	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,700	19	190		1
04688	2-Methylphenol	95-48-7	1,800	39	190		1
04688	4-Methylphenol	106-44-5	1,700	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,000	19	190		1
04688	3-Nitroaniline	99-09-2	1,900	39	190		1
04688	4-Nitroaniline	100-01-6	1,600	77	190		1
04688	Nitrobenzene	98-95-3	1,900	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	2,100	190	580		1
04688	N-Nitrosodimethylamine	62-75-9	1,400	39	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,700	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,500	190	580		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	1,800	19	190		1
04688	Pyrene	129-00-0	2,100	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,800	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	2,000	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	39	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	35	0.77	1.9		1
10138	Acenaphthylene	208-96-8	40	0.39	1.9		1
10138	Anthracene	120-12-7	35	0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	41	0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	40	0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	42	0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	25	0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	42	0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	42	7.0	21		1
10138	Di-n-butylphthalate	84-74-2	52	7.0	21		1
10138	Chrysene	218-01-9	38	0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	31	0.77	1.9		1
10138	Diethylphthalate	84-66-2	42	7.0	21		1
10138	Dimethylphthalate	131-11-3	43	7.0	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	47	7.0	21		1
10138	Fluoranthene	206-44-0	42	0.77	1.9		1
10138	Fluorene	86-73-7	36	0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	30	0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	35	0.77	1.9		1

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Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	2-Methylnaphthalene	91-57-6	31	0.77	1.9		1
10138	Naphthalene	91-20-3	34	0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	40	0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	45	7.0	21		1
10138	Phenanthrene	85-01-8	36	0.77	1.9		1
10138	Pyrene	129-00-0	37	0.77	1.9		1
Herbicides SW-846 8151A							
10401	2,4-D	94-75-7	11	1.4	4.2		1
10401	Dalapon	75-99-0	14	5.1	10		1
10401	2,4-DB	94-82-6	8.0	0.72	2.0		1
10401	Dicamba	1918-00-9	0.99 J	0.46	1.4		1
10401	Dinoseb	88-85-7	0.98 J	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	9.5	0.93	2.0		1
10401	MCPA	94-74-6	800	88	290		1
10401	MCPP (Mecoprop)	93-65-2	770	87	290		1
10401	2,4,5-T	93-76-5	0.85	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.80	0.087	0.20		1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.							
2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for 2,4-DB.							
Pesticides/PCBs SW-846 8081A							
01363	Aldrin	309-00-2	0.36	0.077	0.20		1
01363	Alpha BHC	319-84-6	0.23	0.039	0.20		1
01363	Beta BHC	319-85-7	0.24	0.070	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.23	0.039	0.20		1
01363	Chlordane	57-74-9	0.93 U	0.93	3.9		1
01363	p,p-DDD	72-54-8	0.56	0.077	0.39		1
01363	p,p-DDE	72-55-9	0.77	0.077	0.39		1
01363	p,p-DDT	50-29-3	0.49	0.077	0.39		1
01363	Delta BHC	319-86-8	0.28	0.042	0.20		1
01363	Dieldrin	60-57-1	0.55	0.077	0.39		1
01363	Endosulfan I	959-98-8	0.21	0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.64	0.077	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.81	0.077	0.39		1
01363	Endrin	72-20-8	0.51	0.077	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.51	0.077	0.39		1
01363	Endrin Ketone	53494-70-5	0.69	0.077	0.39		1
01363	Heptachlor	76-44-8	0.27	0.070	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.34	0.039	0.20		1
01363	Methoxychlor	72-43-5	2.9	0.39	1.9		1
01363	Mirex	2385-85-5	0.077 U	0.077	0.39		1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.7		1

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Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.8		1
10225	PCB-1016	12674-11-2	32	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.58 U	0.58	2.0		1
10225	PCB-1232	11141-16-5	0.60 U	0.60	2.0		1
10225	PCB-1242	53469-21-9	0.58 U	0.58	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	29	0.38	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,300	5.84	23.2		1
07914	Boron	7440-42-8	211	1.03	5.81		1
01650	Calcium	7440-70-2	4,000	7.12	23.2		1
01654	Iron	7439-89-6	21,100	5.47	23.2		1
01656	Lithium	7439-93-2	133	0.26	2.3		1
01657	Magnesium	7439-95-4	5,300	2.95	11.6		1
06958	Manganese	7439-96-5	346	0.0906	0.581		1
10145	Phosphorus	7723-14-0	588	0.650	11.6		1
01662	Potassium	7440-09-7	5,020	20.9	58.1		1
01667	Sodium	7440-23-5	1,230	43.3	116		1
07968	Strontium	7440-24-6	127	0.0720	0.581		1
06969	Tin	7440-31-5	421	1.16	11.6		1
06970	Titanium	7440-32-6	1,550	0.441	1.16		1
10146	Zirconium	7440-67-7	114	0.976	5.81		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.591	0.0670	0.223		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.73	0.0670	0.447		2
06126	Barium	7440-39-3	133	0.121	0.447		2
06127	Beryllium	7440-41-7	1.27	0.0179	0.112		2
06128	Cadmium	7440-43-9	1.33	0.0402	0.112		2
06131	Chromium	7440-47-3	27.2	0.134	0.447		2
06132	Cobalt	7440-48-4	58.2	0.0223	0.112		2
06133	Copper	7440-50-8	24.8	0.0730	0.442		2
06135	Lead	7439-92-1	8.74	0.0116	0.223		2
06138	Molybdenum	7439-98-7	12.4	0.0558	0.112		2
06139	Nickel	7440-02-0	22.3	0.112	0.447		2
06141	Selenium	7782-49-2	2.11	0.0447	0.447		2
06142	Silver	7440-22-4	12.3	0.0134	0.112		2

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Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06145	Thallium	7440-28-0	0.749	0.0335	0.112		2
06148	Vanadium	7440-62-2	57.1	0.0243	0.111		2
06149	Zinc	7440-66-6	74.3	0.625	3.35		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.200	0.0032	0.111		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 01:40	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 11:48	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 04:26	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 19:48	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 08:02	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1

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Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06133	Copper	SW-846 6020	2	110101026002A	01/12/2011 09:24	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 13:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:24	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:32	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A	1	103645711003	12/30/2010 11:09	James L Mertz	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173170
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	14,600	5.62	22.3		1
07914	Boron	7440-42-8	4.25 J	0.994	5.58		1
01650	Calcium	7440-70-2	3,150	6.85	22.3		1
01654	Iron	7439-89-6	18,600	5.26	22.3		1
01656	Lithium	7439-93-2	21.1	0.25	2.2		1
01657	Magnesium	7439-95-4	4,350	2.84	11.2		1
06958	Manganese	7439-96-5	278	0.0871	0.558		1
10145	Phosphorus	7723-14-0	365	0.625	11.2		1
01662	Potassium	7440-09-7	2,850	20.1	55.8		1
01667	Sodium	7440-23-5	95.8 J	41.7	112		1
07968	Strontium	7440-24-6	19.3	0.0692	0.558		1
06969	Tin	7440-31-5	2.26 J	1.12	11.2		1
06970	Titanium	7440-32-6	1,140	0.424	1.12		1
10146	Zirconium	7440-67-7	2.34 J	0.938	5.58		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0697 U	0.0697	0.232		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.36	0.0697	0.465		2
06126	Barium	7440-39-3	100	0.125	0.465		2
06127	Beryllium	7440-41-7	0.484	0.0186	0.116		2
06128	Cadmium	7440-43-9	0.131	0.0418	0.116		2
06131	Chromium	7440-47-3	16.7	0.139	0.465		2
06132	Cobalt	7440-48-4	5.59	0.0232	0.116		2
06133	Copper	7440-50-8	9.79	0.0767	0.465		2
06135	Lead	7439-92-1	5.27	0.0121	0.232		2
06138	Molybdenum	7439-98-7	0.523	0.0581	0.116		2
06139	Nickel	7440-02-0	11.7	0.116	0.465		2
06141	Selenium	7782-49-2	0.113 J	0.0465	0.465		2
06142	Silver	7440-22-4	0.0330 J	0.0139	0.116		2
06145	Thallium	7440-28-0	0.252	0.0348	0.116		2
06148	Vanadium	7440-62-2	34.9	0.0256	0.116		2
06149	Zinc	7440-66-6	58.3	0.650	3.48		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0140 J	0.0031	0.107		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0	0.93	1.2		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.5 U	10.5	34.8		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.46 J	0.23	1.2		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173170
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	457	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.76	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50		1
11626	28a Moisture Content by 160.3	n.a.	12.7	0.50	0.50		1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173170
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL100 SDG#: DE051-08DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:21	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/11/2011 13:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:21	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:30	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 13:22	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/14/2011 23:14	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11017243201A	01/20/2011 21:19	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.7 U	6.7	8.0		0.8
06192	Benzene	71-43-2	0.1 U	0.1	4.0		0.8
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.0		0.8
06192	Bromochloromethane	74-97-5	0.33 U	0.33	4.0		0.8
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.0		0.8
06192	Bromoform	75-25-2	0.40 U	0.40	4.0		0.8
06192	Bromomethane	74-83-9	0.25 U	0.25	4.0		0.8
06192	2-Butanone	78-93-3	1.2 U	1.2	8.0		0.8
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.0		0.8
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.0		0.8
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.0		0.8
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.0		0.8
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.0		0.8
06192	Chloroethane	75-00-3	0.13 U	0.13	4.0		0.8
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30 U	0.30	4.0		0.8
06192	Chloroform	67-66-3	0.12 U	0.12	4.0		0.8
06192	Chloromethane	74-87-3	0.33 U	0.33	4.0		0.8
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.0		0.8
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.0		0.8
06192	Chlorotrifluoroethene	79-38-9	0.50 U	0.50	5.0		0.8
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.70 U	0.70	4.0		0.8
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	4.0		0.8
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	4.0		0.8
06192	Dibromomethane	74-95-3	0.24 U	0.24	4.0		0.8
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.0		0.8
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.0		0.8
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.0		0.8
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.0		0.8
06192	1,1-Dichloroethane	75-34-3	0.1 U	0.1	4.0		0.8
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.0		0.8
06192	1,1-Dichloroethene	75-35-4	0.39 U	0.39	4.0		0.8
06192	cis-1,2-Dichloroethene	156-59-2	0.19 U	0.19	4.0		0.8
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.0		0.8
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	4.0		0.8
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.0		0.8
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	4.0		0.8
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.0		0.8
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.0		0.8
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	4.0		0.8
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.0		0.8
06192	Freon 113	76-13-1	0.11 U	0.11	4.0		0.8
06192	Freon 133a	75-88-7	0.50 U	0.50	5.0		0.8
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.0		0.8
06192	2-Hexanone	591-78-6	1.6 U	1.6	8.0		0.8
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.0		0.8
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.0		0.8
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	4.0		0.8
06192	4-Methyl-2-pentanone	108-10-1	0.39 U	0.39	8.0		0.8
06192	Methylene Chloride	75-09-2	0.43 J	0.24	4.0		0.8
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.0		0.8

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.1 U	0.1	4.0		0.8
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.0		0.8
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23 U	0.23	4.0		0.8
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	4.0		0.8
06192	Toluene	108-88-3	0.11 J	0.08	4.0		0.8
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.0		0.8
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	4.0		0.8
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	4.0		0.8
06192	1,1,2-Trichloroethane	79-00-5	0.27 U	0.27	4.0		0.8
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.0		0.8
06192	Trichlorofluoromethane	75-69-4	0.29 U	0.29	4.0		0.8
06192	1,2,3-Trichloropropane	96-18-4	0.33 U	0.33	4.0		0.8
06192	1,2,4-Trimethylbenzene	95-63-6	0.40 U	0.40	4.0		0.8
06192	1,3,5-Trimethylbenzene	108-67-8	0.1 U	0.1	4.0		0.8
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	4.0		0.8
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	4.0		0.8
06192	o-Xylene	95-47-6	0.17 U	0.17	4.0		0.8
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.2 U	5.2	15		20.66
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	104 U	104	208		5
Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.							
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U 210	620		1
04688	Benzidine	92-87-5	1,500	U 1,500	4,200		1
04688	Benzoic acid	65-85-0	210	U 210	620		1
04688	Benzyl alcohol	100-51-6	210	U 210	620		1
04688	4-Bromophenyl-phenylether	101-55-3	21	U 21	210		1
04688	Carbazole	86-74-8	21	U 21	210		1
04688	4-Chloro-3-methylphenol	59-50-7	42	U 42	210		1
04688	4-Chloroaniline	106-47-8	83	U 83	210		1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U 21	210		1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U 21	210		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U 21	210		1
04688	2-Chloronaphthalene	91-58-7	21	U 21	210		1
04688	2-Chlorophenol	95-57-8	21	U 21	210		1
04688	4-Chlorophenyl-phenylether	7005-72-3	42	U 42	210		1
04688	Dibenzofuran	132-64-9	21	U 21	210		1
04688	1,2-Dichlorobenzene	95-50-1	21	U 21	210		1
04688	1,3-Dichlorobenzene	541-73-1	21	U 21	210		1
04688	1,4-Dichlorobenzene	106-46-7	21	U 21	210		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	420		1
04688	2,4-Dichlorophenol	120-83-2	21	U 21	210		1
04688	2,4-Dimethylphenol	105-67-9	42	U 42	210		1

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Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	3,5-Dimethylphenol	108-68-9	42	U 42	210		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U 210	620		1
04688	2,4-Dinitrophenol	51-28-5	830	U 830	2,500		1
04688	2,4-Dinitrotoluene	121-14-2	42	U 42	210		1
04688	2,6-Dinitrotoluene	606-20-2	21	U 21	210		1
04688	1,2-Diphenylhydrazine	122-66-7	21	U 21	210		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	87	J 21	420		1
04688	Hexachlorobenzene	118-74-1	21	U 21	210		1
04688	Hexachlorobutadiene	87-68-3	83	U 83	210		1
04688	Hexachlorocyclopentadiene	77-47-4	210	U 210	620		1
04688	Hexachloroethane	67-72-1	21	U 21	210		1
04688	Isophorone	78-59-1	21	U 21	210		1
04688	2-Methylphenol	95-48-7	42	U 42	210		1
04688	4-Methylphenol	106-44-5	42	U 42	210		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U 21	210		1
04688	3-Nitroaniline	99-09-2	42	U 42	210		1
04688	4-Nitroaniline	100-01-6	83	U 83	210		1
04688	Nitrobenzene	98-95-3	21	U 21	210		1
04688	2-Nitrophenol	88-75-5	21	U 21	210		1
04688	4-Nitrophenol	100-02-7	210	U 210	620		1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U 21	210		1
04688	N-Nitrosodiphenylamine	86-30-6	21	U 21	210		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	210	U 210	620		1
04688	Phenol	108-95-2	21	U 21	210		1
04688	1,2,4-Trichlorobenzene	120-82-1	21	U 21	210		1
04688	2,4,5-Trichlorophenol	95-95-4	42	U 42	210		1
04688	2,4,6-Trichlorophenol	88-06-2	42	U 42	210		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.83	U 0.83	2.1		1
10138	Acenaphthylene	208-96-8	0.42	U 0.42	2.1		1
10138	Anthracene	120-12-7	0.42	U 0.42	2.1		1
10138	Benzo(a)anthracene	56-55-3	1.7	J 0.83	2.1		1
10138	Benzo(a)pyrene	50-32-8	2.2	0.83	2.1		1
10138	Benzo(b)fluoranthene	205-99-2	4.0	0.83	2.1		1
10138	Benzo(g,h,i)perylene	191-24-2	1.3	J 0.83	2.1		1
10138	Benzo(k)fluoranthene	207-08-9	1.6	J 0.83	2.1		1
10138	Butylbenzylphthalate	85-68-7	7.5	U 7.5	22		1
10138	Di-n-butylphthalate	84-74-2	7.5	U 7.5	22		1
10138	Chrysene	218-01-9	2.6	0.42	2.1		1
10138	Dibenz(a,h)anthracene	53-70-3	0.83	U 0.83	2.1		1
10138	Diethylphthalate	84-66-2	7.5	U 7.5	22		1
10138	Dimethylphthalate	131-11-3	7.5	U 7.5	22		1

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Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	Fluoranthene	206-44-0	4.0	0.83	2.1		1
10138	Fluorene	86-73-7	0.83 U	0.83	2.1		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1 J	0.83	2.1		1
10138	1-Methylnaphthalene	90-12-0	0.83 U	0.83	2.1		1
10138	2-Methylnaphthalene	91-57-6	0.83 U	0.83	2.1		1
10138	Naphthalene	91-20-3	0.84 J	0.83	2.1		1
10138	N-Nitrosodimethylamine	62-75-9	0.83 U	0.83	2.1		1
10138	Di-n-octylphthalate	117-84-0	7.5 U	7.5	22		1
10138	Phenanthrene	85-01-8	2.3	0.83	2.1		1
10138	Pyrene	129-00-0	3.8	0.83	2.1		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	2.0 U	2.0	10		200.32
Reporting limits were raised due to sample foaming.							
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	94	U 94	190	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	62	U 62	190	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U 120	370	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U 120	370	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	62	U 62	190	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	62	U 62	190	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	62	U 62	190	1000000 0	1
10132	HMX	2691-41-0	160	U 160	470	1000000 0	1
10132	Nitrobenzene	98-95-3	62	U 62	190	1000000 0	1
10132	Nitroglycerin	55-63-0	1,200	U 1,200	3,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	120	U 120	190	1000000 0	1
10132	3-Nitrotoluene	99-08-1	160	U 160	190	1000000 0	1
10132	4-Nitrotoluene	99-99-0	120	U 120	190	1000000 0	1
10132	PETN	78-11-5	1,200	U 1,200	3,700	1000000 0	1
10132	RDX	121-82-4	78	U 78	190	1000000 0	1
10132	Tetryl	479-45-8	95	U 95	190	1000000 0	1

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SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
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Project Name: SSFL Area IV Collocated Soil Sampling

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SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	62	U 62	190	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	62	U 62	190	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.5	U 1.5	4.5		1
10401	Dalapon	75-99-0	5.5	U 5.5	11		1
10401	2,4-DB	94-82-6	0.87	J 0.77	2.1		1
10401	Dicamba	1918-00-9	0.50	U 0.50	1.5		1
10401	Dinoseb	88-85-7	1.0	U 1.0	3.0		1
10401	2,4-DP (Dichlorprop)	120-36-5	1.5	U 1.5	2.1		1
10401	MCPA	94-74-6	190	U 190	310		1
10401	MCPP (Mecoprop)	93-65-2	94	U 94	310		1
10401	2,4,5-T	93-76-5	0.12	U 0.12	0.21		1
10401	2,4,5-TP	93-72-1	0.094	U 0.094	0.21		1
The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. 2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for 2,4-DB. Due to interfering peaks on the chromatogram, the values reported for MCPA, 2,4-DP and 2,4,5-TP represent the lowest reporting limits attainable.							
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by	50-00-0	750	U 750	1,900		1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.082	U 0.082	0.21		1
01363	Alpha BHC	319-84-6	0.042	U 0.042	0.21		1
01363	Beta BHC	319-85-7	0.075	U 0.075	0.21		1
01363	Gamma BHC - Lindane	58-89-9	0.042	U 0.042	0.21		1
01363	Chlordane	57-74-9	3.2	U 3.2	4.2		1
01363	p,p-DDD	72-54-8	0.19	U 0.19	0.42		1
01363	p,p-DDE	72-55-9	0.082	U 0.082	0.42		1
01363	p,p-DDT	50-29-3	0.34	U 0.34	0.42		1
01363	Delta BHC	319-86-8	0.045	U 0.045	0.21		1
01363	Dieldrin	60-57-1	0.094	U 0.094	0.42		1
01363	Endosulfan I	959-98-8	0.055	U 0.055	0.21		1
01363	Endosulfan II	33213-65-9	0.082	U 0.082	0.42		1
01363	Endosulfan Sulfate	1031-07-8	0.082	U 0.082	0.42		1
01363	Endrin	72-20-8	0.082	U 0.082	0.42		1
01363	Endrin Aldehyde	7421-93-4	0.12	U 0.12	0.42		1
01363	Endrin Ketone	53494-70-5	0.082	U 0.082	0.42		1
01363	Heptachlor	76-44-8	0.075	U 0.075	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.079	U 0.079	0.21		1

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Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Methoxychlor	72-43-5	0.42 U	0.42	2.1		1
01363	Mirex	2385-85-5	0.11 U	0.11	0.42		1
01363	Toxaphene	8001-35-2	2.7 U	2.7	8.2		1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	4.1		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	4.1		1
10225	Aroclor 5460	11126-42-4	1.9 J	1.2	4.1		1
10225	PCB-1016	12674-11-2	0.41 U	0.41	2.1		1
10225	PCB-1221	11104-28-2	0.62 U	0.62	2.1		1
10225	PCB-1232	11141-16-5	0.65 U	0.65	2.1		1
10225	PCB-1242	53469-21-9	0.62 U	0.62	2.1		1
10225	PCB-1248	12672-29-6	0.41 U	0.41	2.1		1
10225	PCB-1254	11097-69-1	3.4	0.41	2.1		1
10225	PCB-1260	11096-82-5	1.1 J	0.41	2.1		1
10225	PCB-1262	37324-23-5	0.41 U	0.41	2.1		1
10225	PCB-1268	11100-14-4	0.41 U	0.41	2.1		1

GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.50 U	0.50	1.5		1
10199	EFH (C15-C20)	n.a.	0.61 J	0.50	1.5		1
10199	EFH (C21-C30)	n.a.	2.6	0.50	1.5		1
10199	EFH (C30 - C40)	n.a.	9.9	0.50	1.5		1
10199	EFH (C8-C11)	n.a.	0.50 U	0.50	1.5		1

GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120 U	120	620		1
10501	Isopropanol	67-63-0	140 J	120	620		1
10501	Methanol	67-56-1	520 J	120	620		1

Methanol was detected in the method blank at a concentration of 110 ug/kg. The sample was re-extracted and run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis. The data is reported from the second extraction. The methanol result for the original extraction is 160 ug/kg; the ethanol result for the original extraction is <100 ug/kg and the isopropanol result for the original extraction is 120 ug/kg.

GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	

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Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
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Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	6.2 U	6.2	16		1
08283	Ethylene glycol	107-21-1	17 U	17	17		1
08283	Propylene glycol	57-55-6	6.2 U	6.2	16		1
Reporting limits were raised due to interference from the sample matrix.							
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.9 U	1.9	4.4		1
10318	o-Terphenyl	84-15-1	1.9 U	1.9	4.4		1
10318	p-Terphenyl	92-94-4	1.9 U	1.9	4.4		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,800	6.27	24.9		1
07914	Boron	7440-42-8	9.74	1.11	6.23		1
01650	Calcium	7440-70-2	27,500	7.64	24.9		1
01654	Iron	7439-89-6	22,700	5.87	24.9		1
01656	Lithium	7439-93-2	22.7	0.27	2.5		1
01657	Magnesium	7439-95-4	6,260	3.17	12.5		1
06958	Manganese	7439-96-5	292	0.0973	0.623		1
10145	Phosphorus	7723-14-0	534	0.698	12.5		1
01662	Potassium	7440-09-7	4,650	22.4	62.3		1
01667	Sodium	7440-23-5	133	46.5	125		1
07968	Strontium	7440-24-6	58.9	0.0773	0.623		1
06969	Tin	7440-31-5	2.21 J	1.25	12.5		1
06970	Titanium	7440-32-6	1,270	0.474	1.25		1
10146	Zirconium	7440-67-7	1.94 J	1.05	6.23		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0895 J	0.0741	0.247		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.93	0.0741	0.494		2
06126	Barium	7440-39-3	109	0.133	0.494		2
06127	Beryllium	7440-41-7	0.513	0.0198	0.123		2
06128	Cadmium	7440-43-9	0.256	0.0444	0.123		2
06131	Chromium	7440-47-3	23.6	0.148	0.494		2
06132	Cobalt	7440-48-4	7.12	0.0247	0.123		2
06133	Copper	7440-50-8	13.6	0.0784	0.475		2
06135	Lead	7439-92-1	7.69	0.0128	0.247		2
06138	Molybdenum	7439-98-7	0.459	0.0617	0.123		2
06139	Nickel	7440-02-0	14.4	0.123	0.494		2
06141	Selenium	7782-49-2	0.188 J	0.0494	0.494		2
06142	Silver	7440-22-4	0.0289 J	0.0148	0.123		2
06145	Thallium	7440-28-0	0.296	0.0370	0.123		2
06148	Vanadium	7440-62-2	56.9	0.0261	0.119		2
06149	Zinc	7440-66-6	78.1	0.691	3.70		2

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SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
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SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
00159	Mercury	SW-846 7471A 7439-97-6	mg/kg 0.0035 U	mg/kg 0.0035	mg/kg 0.123	mg/kg	1
Wet Chemistry							
07332	11a Anions by 300.0 - Fluoride	EPA 300.0 16984-48-8	mg/kg 1.3	mg/kg 1.0	mg/kg 1.2	mg/kg	1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.0 U	1.0	1.9		1
EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	ug/kg 11.2 U	ug/kg 11.2	ug/kg 37.4	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	mg/kg 0.36 J	mg/kg 0.25	mg/kg 1.2	mg/kg	1
SW-846 9012B							
05895	21a Cyanide by 9012B	57-12-5	mg/kg 0.21 U	mg/kg 0.21	mg/kg 0.60	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	mV 443	mV 10.0	mV 10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	Std. Units 8.21	Std. Units 0.0100	Std. Units 0.0100	Std. Units	1
Wet Chemistry							
11624	28a Moisture Content by 160.3	EPA 160.3 modified n.a.	% 19.8	% 0.50	% 0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010 17:09	Chelsea B Eastep	0.8
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010 10:51	Jason M Long	20.66

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL114 SDG#: DE051-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:31	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010 17:29	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011 17:34	Timothy J Trees	5
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 05:09	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 14:59	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10357A34B	12/27/2010 20:27	Carrie E Miller	200.32
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:28	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103650008A	01/06/2011 06:39	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103610005A	12/29/2010 19:27	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 08:04	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 20:03	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 08:21	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103610005A	12/27/2010 15:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103650008A	01/03/2011 16:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 20:11	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103640014A	12/30/2010 17:42	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103630032A	12/29/2010 21:13	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103640012A	01/05/2011 08:49	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103640012A	12/31/2010 00:30	David V Hershey Jr	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103630032A	12/29/2010 17:00	Tyler O Griffin	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103640014A	12/30/2010 13:30	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL114 SDG#: DE051-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:11	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:40	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:11	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:11	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:40	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:34	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 14:05	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11013013201B	01/14/2011 14:05	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 00:23	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11017243201A	01/20/2011 21:32	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	2	11004102201A	01/04/2011 19:08	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11004102201A	01/04/2011 09:15	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL114 SDG#: DE051-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL102 SDG#: DE051-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	75	U 75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	750	U 750	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	75	U 75	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenol	108-95-2	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL102 SDG#: DE051-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U 0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.75	U 0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.75	U 0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U 0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U 0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U 0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8	U 6.8	20		1
10138	Di-n-butylphthalate	84-74-2	7.2	J 6.8	20		1
10138	Chrysene	218-01-9	0.38	U 0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U 0.75	1.9		1
10138	Diethylphthalate	84-66-2	7.7	J 6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8	U 6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.8	U 6.8	20		1
10138	Fluoranthene	206-44-0	0.75	U 0.75	1.9		1
10138	Fluorene	86-73-7	0.75	U 0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U 0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.75	U 0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.75	U 0.75	1.9		1
10138	Naphthalene	91-20-3	0.75	U 0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U 0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8	U 6.8	20		1
10138	Phenanthrene	85-01-8	0.75	U 0.75	1.9		1
10138	Pyrene	129-00-0	0.75	U 0.75	1.9		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U 1.4	4.1		1
10401	Dalapon	75-99-0	5.0	U 5.0	10		1
10401	2,4-DB	94-82-6	1.2	J 0.70	1.9		1
10401	Dicamba	1918-00-9	0.45	U 0.45	1.4		1
10401	Dinoseb	88-85-7	0.90	U 0.90	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U 0.90	1.9		1
10401	MCPA	94-74-6	86	U 86	280		1
10401	MCPP (Mecoprop)	93-65-2	85	U 85	280		1
10401	2,4,5-T	93-76-5	0.093	U 0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085	U 0.085	0.19		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL102 SDG#: DE051-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
2,4-DB.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.075 U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.19		1
01363	Beta BHC	319-85-7	0.068 U	0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.19		1
01363	Chlordane	57-74-9	0.90 U	0.90	3.8		1
01363	p,p-DDD	72-54-8	0.075 U	0.075	0.38		1
01363	p,p-DDE	72-55-9	0.075 U	0.075	0.38		1
01363	p,p-DDT	50-29-3	0.075 U	0.075	0.38		1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.075 U	0.075	0.38		1
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	0.075 U	0.075	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.075 U	0.075	0.38		1
01363	Endrin	72-20-8	0.075 U	0.075	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.075 U	0.075	0.38		1
01363	Endrin Ketone	53494-70-5	0.075 U	0.075	0.38		1
01363	Heptachlor	76-44-8	0.068 U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.038 U	0.038	0.19		1
01363	Methoxychlor	72-43-5	0.38 U	0.38	1.9		1
01363	Mirex	2385-85-5	0.075 U	0.075	0.38		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.5		1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.59 U	0.59	1.9		1
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37 U	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,000	5.47	21.7		1
07914	Boron	7440-42-8	4.70 J	0.967	5.43		1
01650	Calcium	7440-70-2	4,940	6.66	21.7		1
01654	Iron	7439-89-6	21,000	5.12	21.7		1
01656	Lithium	7439-93-2	22.7	0.24	2.2		1
01657	Magnesium	7439-95-4	4,600	2.76	10.9		1
06958	Manganese	7439-96-5	304	0.0847	0.543		1
10145	Phosphorus	7723-14-0	344	0.608	10.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL102 SDG#: DE051-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01662	Potassium	7440-09-7	3,290	19.6	54.3		1
01667	Sodium	7440-23-5	118	40.5	109		1
07968	Strontium	7440-24-6	24.5	0.0674	0.543		1
06969	Tin	7440-31-5	2.27 J	1.09	10.9		1
06970	Titanium	7440-32-6	1,150	0.413	1.09		1
10146	Zirconium	7440-67-7	2.04 J	0.913	5.43		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.134 J	0.0665	0.222		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.55	0.0665	0.443		2
06126	Barium	7440-39-3	108	0.120	0.443		2
06127	Beryllium	7440-41-7	0.659	0.0177	0.111		2
06128	Cadmium	7440-43-9	0.367	0.0399	0.111		2
06131	Chromium	7440-47-3	30.9	0.133	0.443		2
06132	Cobalt	7440-48-4	7.79	0.0222	0.111		2
06133	Copper	7440-50-8	14.5	0.0738	0.448		2
06135	Lead	7439-92-1	9.32	0.0115	0.222		2
06138	Molybdenum	7439-98-7	15.9	0.0554	0.111		2
06139	Nickel	7440-02-0	24.0	0.111	0.443		2
06141	Selenium	7782-49-2	0.195 J	0.0443	0.443		2
06142	Silver	7440-22-4	0.0333 J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.323	0.0332	0.111		2
06148	Vanadium	7440-62-2	50.9	0.0246	0.112		2
06149	Zinc	7440-66-6	113	0.620	3.32		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0763 J	0.0031	0.108		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.90	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	33.9		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32 J	0.23	1.1		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	415	10.0	10.0		1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL102 SDG#: DE051-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.71	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	11.5	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011	05:44	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011	15:32	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011	18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010	06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011	08:32	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011	20:17	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011	08:40	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011	06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010	06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011	23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010	10:30	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL102 SDG#: DE051-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:14	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06133	Copper	SW-846 6020	2	110101026002A	01/12/2011 09:42	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:14	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:14	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:42	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:35	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 14:19	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 00:47	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 21:51	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL124 SDG#: DE051-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U 210	630		1
04688	Benzidine	92-87-5	1,500	U 1,500	4,200		1
04688	Benzoic acid	65-85-0	210	U 210	630		1
04688	Benzyl alcohol	100-51-6	210	U 210	630		1
04688	4-Bromophenyl-phenylether	101-55-3	21	U 21	210		1
04688	Carbazole	86-74-8	21	U 21	210		1
04688	4-Chloro-3-methylphenol	59-50-7	42	U 42	210		1
04688	4-Chloroaniline	106-47-8	84	U 84	210		1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U 21	210		1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U 21	210		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U 21	210		1
04688	2-Chloronaphthalene	91-58-7	21	U 21	210		1
04688	2-Chlorophenol	95-57-8	21	U 21	210		1
04688	4-Chlorophenyl-phenylether	7005-72-3	42	U 42	210		1
04688	Dibenzofuran	132-64-9	21	U 21	210		1
04688	1,2-Dichlorobenzene	95-50-1	21	U 21	210		1
04688	1,3-Dichlorobenzene	541-73-1	21	U 21	210		1
04688	1,4-Dichlorobenzene	106-46-7	21	U 21	210		1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U 130	420		1
04688	2,4-Dichlorophenol	120-83-2	21	U 21	210		1
04688	2,4-Dimethylphenol	105-67-9	42	U 42	210		1
04688	3,5-Dimethylphenol	108-68-9	42	U 42	210		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U 210	630		1
04688	2,4-Dinitrophenol	51-28-5	840	U 840	2,500		1
04688	2,4-Dinitrotoluene	121-14-2	42	U 42	210		1
04688	2,6-Dinitrotoluene	606-20-2	21	U 21	210		1
04688	1,2-Diphenylhydrazine	122-66-7	21	U 21	210		1
04688	Hexachlorobenzene	118-74-1	21	U 21	210		1
04688	Hexachlorobutadiene	87-68-3	84	U 84	210		1
04688	Hexachlorocyclopentadiene	77-47-4	210	U 210	630		1
04688	Hexachloroethane	67-72-1	21	U 21	210		1
04688	Isophorone	78-59-1	21	U 21	210		1
04688	2-Methylphenol	95-48-7	42	U 42	210		1
04688	4-Methylphenol	106-44-5	42	U 42	210		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U 21	210		1
04688	3-Nitroaniline	99-09-2	42	U 42	210		1
04688	4-Nitroaniline	100-01-6	84	U 84	210		1
04688	Nitrobenzene	98-95-3	21	U 21	210		1
04688	2-Nitrophenol	88-75-5	21	U 21	210		1
04688	4-Nitrophenol	100-02-7	210	U 210	630		1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U 21	210		1
04688	N-Nitrosodiphenylamine	86-30-6	21	U 21	210		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	210	U 210	630		1
04688	Phenol	108-95-2	21	U 21	210		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL124 SDG#: DE051-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	21	U 21	210		1
04688	2,4,5-Trichlorophenol	95-95-4	42	U 42	210		1
04688	2,4,6-Trichlorophenol	88-06-2	42	U 42	210		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.84	U 0.84	2.1		1
10138	Acenaphthylene	208-96-8	0.42	U 0.42	2.1		1
10138	Anthracene	120-12-7	0.42	U 0.42	2.1		1
10138	Benzo(a)anthracene	56-55-3	1.3	J 0.84	2.1		1
10138	Benzo(a)pyrene	50-32-8	1.3	J 0.84	2.1		1
10138	Benzo(b)fluoranthene	205-99-2	2.6	U 0.84	2.1		1
10138	Benzo(g,h,i)perylene	191-24-2	0.84	U 0.84	2.1		1
10138	Benzo(k)fluoranthene	207-08-9	0.85	J 0.84	2.1		1
10138	Butylbenzylphthalate	85-68-7	7.5	U 7.5	23		1
10138	Di-n-butylphthalate	84-74-2	12	J 7.5	23		1
10138	Chrysene	218-01-9	1.6	J 0.42	2.1		1
10138	Dibenz(a,h)anthracene	53-70-3	0.84	U 0.84	2.1		1
10138	Diethylphthalate	84-66-2	7.5	U 7.5	23		1
10138	Dimethylphthalate	131-11-3	7.5	U 7.5	23		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.5	U 7.5	23		1
10138	Fluoranthene	206-44-0	2.3	U 0.84	2.1		1
10138	Fluorene	86-73-7	0.84	U 0.84	2.1		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.84	U 0.84	2.1		1
10138	1-Methylnaphthalene	90-12-0	0.84	U 0.84	2.1		1
10138	2-Methylnaphthalene	91-57-6	0.84	U 0.84	2.1		1
10138	Naphthalene	91-20-3	0.84	U 0.84	2.1		1
10138	N-Nitrosodimethylamine	62-75-9	0.84	U 0.84	2.1		1
10138	Di-n-octylphthalate	117-84-0	7.5	U 7.5	23		1
10138	Phenanthrene	85-01-8	0.84	U 0.84	2.1		1
10138	Pyrene	129-00-0	2.0	J 0.84	2.1		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.5	U 1.5	4.5		1
10401	Dalapon	75-99-0	5.5	U 5.5	11		1
10401	2,4-DB	94-82-6	0.97	J 0.78	2.1		1
10401	Dicamba	1918-00-9	0.50	U 0.50	1.5		1
10401	Dinoseb	88-85-7	1.0	U 1.0	3.0		1
10401	2,4-DP (Dichlorprop)	120-36-5	1.2	U 1.2	2.1		1
10401	MCPA	94-74-6	95	U 95	310		1
10401	MCPP (Mecoprop)	93-65-2	94	U 94	310		1
10401	2,4,5-T	93-76-5	0.10	U 0.10	0.21		1
10401	2,4,5-TP	93-72-1	0.094	U 0.094	0.21		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL124 SDG#: DE051-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
2,4-DB.							
Due to interfering peaks on the chromatogram, the values reported for 2,4-DP represent the lowest reporting limits attainable.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.083 U	0.083	0.21		1
01363	Alpha BHC	319-84-6	0.043 U	0.043	0.21		1
01363	Beta BHC	319-85-7	0.075 U	0.075	0.21		1
01363	Gamma BHC - Lindane	58-89-9	0.043 U	0.043	0.21		1
01363	Chlordane	57-74-9	1.0 U	1.0	4.3		1
01363	p,p-DDD	72-54-8	0.083 U	0.083	0.43		1
01363	p,p-DDE	72-55-9	0.15 U	0.15	0.43		1
01363	p,p-DDT	50-29-3	0.14 U	0.14	0.43		1
01363	Delta BHC	319-86-8	0.045 U	0.045	0.21		1
01363	Dieldrin	60-57-1	0.083 U	0.083	0.43		1
01363	Endosulfan I	959-98-8	0.055 U	0.055	0.21		1
01363	Endosulfan II	33213-65-9	0.083 U	0.083	0.43		1
01363	Endosulfan Sulfate	1031-07-8	0.14 U	0.14	0.43		1
01363	Endrin	72-20-8	0.083 U	0.083	0.43		1
01363	Endrin Aldehyde	7421-93-4	0.083 U	0.083	0.43		1
01363	Endrin Ketone	53494-70-5	0.083 U	0.083	0.43		1
01363	Heptachlor	76-44-8	0.075 U	0.075	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.043 U	0.043	0.21		1
01363	Methoxychlor	72-43-5	0.43 U	0.43	2.1		1
01363	Mirex	2385-85-5	0.083 U	0.083	0.43		1
01363	Toxaphene	8001-35-2	2.8 U	2.8	8.3		1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.3 U	1.3	4.1		1
10225	Aroclor 5442	12642-23-8	1.3 U	1.3	4.1		1
10225	Aroclor 5460	11126-42-4	1.4 J	1.3	4.1		1
10225	PCB-1016	12674-11-2	0.41 U	0.41	2.1		1
10225	PCB-1221	11104-28-2	0.63 U	0.63	2.1		1
10225	PCB-1232	11141-16-5	0.65 U	0.65	2.1		1
10225	PCB-1242	53469-21-9	0.63 U	0.63	2.1		1
10225	PCB-1248	12672-29-6	22	0.41	2.1		1
10225	PCB-1254	11097-69-1	0.41 U	0.41	2.1		1
10225	PCB-1260	11096-82-5	1.2 J	0.41	2.1		1
10225	PCB-1262	37324-23-5	0.41 U	0.41	2.1		1
10225	PCB-1268	11100-14-4	0.41 U	0.41	2.1		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,800	6.06	24.1		1
07914	Boron	7440-42-8	4.85 J	1.07	6.02		1
01650	Calcium	7440-70-2	4,630	7.39	24.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL124 SDG#: DE051-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	20,000	5.68	24.1		1
01656	Lithium	7439-93-2	19.4	0.27	2.4		1
01657	Magnesium	7439-95-4	4,210	3.06	12.0		1
06958	Manganese	7439-96-5	266	0.0940	0.602		1
10145	Phosphorus	7723-14-0	362	0.675	12.0		1
01662	Potassium	7440-09-7	2,720	21.7	60.2		1
01667	Sodium	7440-23-5	104 J	44.9	120		1
07968	Strontium	7440-24-6	23.2	0.0747	0.602		1
06969	Tin	7440-31-5	2.26 J	1.20	12.0		1
06970	Titanium	7440-32-6	1,080	0.458	1.20		1
10146	Zirconium	7440-67-7	2.14 J	1.01	6.02		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0752 U	0.0752	0.251		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.86	0.0752	0.501		2
06126	Barium	7440-39-3	94.8	0.135	0.501		2
06127	Beryllium	7440-41-7	0.586	0.0201	0.125		2
06128	Cadmium	7440-43-9	0.158	0.0451	0.125		2
06131	Chromium	7440-47-3	19.8	0.150	0.501		2
06132	Cobalt	7440-48-4	6.01	0.0251	0.125		2
06133	Copper	7440-50-8	7.76	0.0795	0.482		2
06135	Lead	7439-92-1	5.97	0.0130	0.251		2
06138	Molybdenum	7439-98-7	0.579	0.0627	0.125		2
06139	Nickel	7440-02-0	11.7	0.125	0.501		2
06141	Selenium	7782-49-2	0.152 J	0.0501	0.501		2
06142	Silver	7440-22-4	0.0342 J	0.0150	0.125		2
06145	Thallium	7440-28-0	0.277	0.0376	0.125		2
06148	Vanadium	7440-62-2	35.8	0.0265	0.120		2
06149	Zinc	7440-66-6	66.0	0.702	3.76		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0108 J	0.0035	0.120		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.4	1.0	1.3		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.3 U	11.3	37.6		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.25 J	0.25	1.3		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	433	10.0	10.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL124 SDG#: DE051-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.24	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	20.2	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 09:47	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 16:04	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 08:59	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 20:32	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 08:58	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

SL124 SDG#: DE051-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:17	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:17	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:17	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:36	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 15:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 01:10	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 22:03	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15745 SDG#: DE051-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	58	6.4	7.6		0.87
06192	Benzene	71-43-2	0.1 U	0.1	3.8		0.87
06192	Bromobenzene	108-86-1	0.12 U	0.12	3.8		0.87
06192	Bromochloromethane	74-97-5	0.31 U	0.31	3.8		0.87
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	3.8		0.87
06192	Bromoform	75-25-2	0.38 U	0.38	3.8		0.87
06192	Bromomethane	74-83-9	0.24 U	0.24	3.8		0.87
06192	2-Butanone	78-93-3	7.6	1.2	7.6		0.87
06192	n-Butylbenzene	104-51-8	0.11 U	0.11	3.8		0.87
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	3.8		0.87
06192	tert-Butylbenzene	98-06-6	0.15 U	0.15	3.8		0.87
06192	Carbon Tetrachloride	56-23-5	0.13 U	0.13	3.8		0.87
06192	Chlorobenzene	108-90-7	0.10 U	0.10	3.8		0.87
06192	Chloroethane	75-00-3	0.12 U	0.12	3.8		0.87
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.29 U	0.29	3.8		0.87
06192	Chloroform	67-66-3	0.11 U	0.11	3.8		0.87
06192	Chloromethane	74-87-3	0.31 U	0.31	3.8		0.87
06192	2-Chlorotoluene	95-49-8	0.13 U	0.13	3.8		0.87
06192	4-Chlorotoluene	106-43-4	0.13 U	0.13	3.8		0.87
06192	Chlorotrifluoroethene	79-38-9	0.48 U	0.48	4.7		0.87
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.67 U	0.67	3.8		0.87
06192	Dibromochloromethane	124-48-1	0.19 U	0.19	3.8		0.87
06192	1,2-Dibromoethane	106-93-4	0.16 U	0.16	3.8		0.87
06192	Dibromomethane	74-95-3	0.23 U	0.23	3.8		0.87
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	3.8		0.87
06192	1,3-Dichlorobenzene	541-73-1	0.11 U	0.11	3.8		0.87
06192	1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	3.8		0.87
06192	Dichlorodifluoromethane	75-71-8	0.11 U	0.11	3.8		0.87
06192	1,1-Dichloroethane	75-34-3	0.1 U	0.1	3.8		0.87
06192	1,2-Dichloroethane	107-06-2	0.14 U	0.14	3.8		0.87
06192	1,1-Dichloroethene	75-35-4	0.37 U	0.37	3.8		0.87
06192	cis-1,2-Dichloroethene	156-59-2	0.18 U	0.18	3.8		0.87
06192	trans-1,2-Dichloroethene	156-60-5	0.11 U	0.11	3.8		0.87
06192	1,2-Dichloropropane	78-87-5	0.16 U	0.16	3.8		0.87
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	3.8		0.87
06192	2,2-Dichloropropane	594-20-7	0.16 U	0.16	3.8		0.87
06192	1,1-Dichloropropene	563-58-6	0.12 U	0.12	3.8		0.87
06192	cis-1,3-Dichloropropene	10061-01-5	0.15 U	0.15	3.8		0.87
06192	trans-1,3-Dichloropropene	10061-02-6	0.16 U	0.16	3.8		0.87
06192	Ethylbenzene	100-41-4	0.06 U	0.06	3.8		0.87
06192	Freon 113	76-13-1	0.10 U	0.10	3.8		0.87
06192	Freon 133a	75-88-7	0.48 U	0.48	4.7		0.87
06192	Hexachlorobutadiene	87-68-3	0.13 U	0.13	3.8		0.87
06192	2-Hexanone	591-78-6	1.5 U	1.5	7.6		0.87
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	3.8		0.87
06192	p-Isopropyltoluene	99-87-6	0.10 U	0.10	3.8		0.87
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20 U	0.20	3.8		0.87
06192	4-Methyl-2-pentanone	108-10-1	0.37 U	0.37	7.6		0.87
06192	Methylene Chloride	75-09-2	3.8 J	0.23	3.8		0.87
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	3.8		0.87

*=This limit was used in the evaluation of the final result

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Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15745 SDG#: DE051-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.1 U	0.1	3.8		0.87
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.10 U	0.10	3.8		0.87
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22 U	0.22	3.8		0.87
06192	Tetrachloroethene	127-18-4	0.19 U	0.19	3.8		0.87
06192	Toluene	108-88-3	0.09 J	0.08	3.8		0.87
06192	1,2,3-Trichlorobenzene	87-61-6	0.13 U	0.13	3.8		0.87
06192	1,2,4-Trichlorobenzene	120-82-1	0.17 U	0.17	3.8		0.87
06192	1,1,1-Trichloroethane	71-55-6	0.19 U	0.19	3.8		0.87
06192	1,1,2-Trichloroethane	79-00-5	0.26 U	0.26	3.8		0.87
06192	Trichloroethene	79-01-6	0.14 U	0.14	3.8		0.87
06192	Trichlorofluoromethane	75-69-4	0.28 U	0.28	3.8		0.87
06192	1,2,3-Trichloropropane	96-18-4	0.31 U	0.31	3.8		0.87
06192	1,2,4-Trimethylbenzene	95-63-6	0.38 U	0.38	3.8		0.87
06192	1,3,5-Trimethylbenzene	108-67-8	0.1 U	0.1	3.8		0.87
06192	Vinyl Chloride	75-01-4	0.19 U	0.19	3.8		0.87
06192	m+p-Xylene	179601-23-1	0.16 U	0.16	3.8		0.87
06192	o-Xylene	95-47-6	0.16 U	0.16	3.8		0.87
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.1 U	5.1	15		23.36
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U 730	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1

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Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15745 SDG#: DE051-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.8		1
10138	Anthracene	120-12-7	0.37	U 0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U 0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U 0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U 0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U 6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U 6.6	20		1
10138	Chrysene	218-01-9	0.37	U 0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U 6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U 6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.6	U 6.6	20		1
10138	Fluoranthene	206-44-0	0.73	U 0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U 0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U 0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U 0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U 0.73	1.8		1

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Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15745 SDG#: DE051-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6 U	6.6	20		1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8		1
Pesticides/PCBs SW-846 8082							
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.55 U	0.55	1.9		1
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.9		1
10225	PCB-1242	53469-21-9	0.55 U	0.55	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.36 U	0.36	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
Metals SW-846 6010B							
01643	Aluminum	7429-90-5	15,000	5.26	20.9		1
07914	Boron	7440-42-8	3.70 J	0.930	5.23		1
01650	Calcium	7440-70-2	2,180	6.41	20.9		1
01654	Iron	7439-89-6	19,000	4.92	20.9		1
01656	Lithium	7439-93-2	22.5	0.23	2.1		1
01657	Magnesium	7439-95-4	4,010	2.66	10.5		1
06958	Manganese	7439-96-5	287	0.0815	0.523		1
10145	Phosphorus	7723-14-0	391	0.585	10.5		1
01662	Potassium	7440-09-7	2,800	18.8	52.3		1
01667	Sodium	7440-23-5	113	39.0	105		1
07968	Strontium	7440-24-6	14.9	0.0648	0.523		1
06969	Tin	7440-31-5	2.24 J	1.05	10.5		1
06970	Titanium	7440-32-6	1,010	0.397	1.05		1
10146	Zirconium	7440-67-7	1.84 J	0.878	5.23		1
SW-846 6020							
06124	Antimony	7440-36-0	0.0639 U	0.0639	0.213		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.63	0.0639	0.426		2
06126	Barium	7440-39-3	89.8	0.115	0.426		2
06127	Beryllium	7440-41-7	0.576	0.0171	0.107		2
06128	Cadmium	7440-43-9	0.139	0.0384	0.107		2
06131	Chromium	7440-47-3	17.8	0.128	0.426		2
06132	Cobalt	7440-48-4	5.81	0.0213	0.107		2
06133	Copper	7440-50-8	9.36	0.0697	0.422		2
06135	Lead	7439-92-1	5.81	0.0111	0.213		2
06138	Molybdenum	7439-98-7	0.668	0.0533	0.107		2

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Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15745 SDG#: DE051-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06139	Nickel	7440-02-0	11.9	0.107	0.426		2
06141	Selenium	7782-49-2	0.146 J	0.0426	0.426		2
06142	Silver	7440-22-4	0.0237 J	0.0128	0.107		2
06145	Thallium	7440-28-0	0.264	0.0320	0.107		2
06148	Vanadium	7440-62-2	41.5	0.0232	0.106		2
06149	Zinc	7440-66-6	52.8	0.597	3.20		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0042 J	0.0031	0.110		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.7	0.88	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	32.9		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.40 J	0.22	1.1		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	412	10.0	10.0		1
		The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.66	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.9	0.50	0.50		1
		"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-157-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

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14420 Albemarle Point Place
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Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15745 SDG#: DE051-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010 17:32	Chelsea B Eastep	0.87
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010 11:11	Jason M Long	23.36
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:37	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010 17:34	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 10:22	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 16:37	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 09:17	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:46	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:46	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:37	Nelli S Markaryan	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15745 SDG#: DE051-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 15:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 01:33	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 22:15	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15845 SDG#: DE051-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.1 U	7.1	8.5		0.96
06192	Benzene	71-43-2	0.11 U	0.11	4.2		0.96
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.2		0.96
06192	Bromochloromethane	74-97-5	0.35 U	0.35	4.2		0.96
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.2		0.96
06192	Bromoform	75-25-2	0.42 U	0.42	4.2		0.96
06192	Bromomethane	74-83-9	0.26 U	0.26	4.2		0.96
06192	2-Butanone	78-93-3	1.3 U	1.3	8.5		0.96
06192	n-Butylbenzene	104-51-8	0.13 U	0.13	4.2		0.96
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.2		0.96
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.2		0.96
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.2		0.96
06192	Chlorobenzene	108-90-7	0.12 U	0.12	4.2		0.96
06192	Chloroethane	75-00-3	0.14 U	0.14	4.2		0.96
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.32 U	0.32	4.2		0.96
06192	Chloroform	67-66-3	0.13 U	0.13	4.2		0.96
06192	Chloromethane	74-87-3	0.35 U	0.35	4.2		0.96
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.2		0.96
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.2		0.96
06192	Chlorotrifluoroethene	79-38-9	0.53 U	0.53	5.3		0.96
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.74 U	0.74	4.2		0.96
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.2		0.96
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.2		0.96
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.2		0.96
06192	1,2-Dichlorobenzene	95-50-1	0.1 U	0.1	4.2		0.96
06192	1,3-Dichlorobenzene	541-73-1	0.13 U	0.13	4.2		0.96
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.2		0.96
06192	Dichlorodifluoromethane	75-71-8	0.13 U	0.13	4.2		0.96
06192	1,1-Dichloroethane	75-34-3	0.11 U	0.11	4.2		0.96
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.2		0.96
06192	1,1-Dichloroethene	75-35-4	0.41 U	0.41	4.2		0.96
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.2		0.96
06192	trans-1,2-Dichloroethene	156-60-5	0.13 U	0.13	4.2		0.96
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.2		0.96
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.2		0.96
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.2		0.96
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.2		0.96
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.2		0.96
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.2		0.96
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.2		0.96
06192	Freon 113	76-13-1	0.12 U	0.12	4.2		0.96
06192	Freon 133a	75-88-7	0.53 U	0.53	5.3		0.96
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.2		0.96
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.5		0.96
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.2		0.96
06192	p-Isopropyltoluene	99-87-6	0.12 U	0.12	4.2		0.96
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.2		0.96
06192	4-Methyl-2-pentanone	108-10-1	0.41 U	0.41	8.5		0.96
06192	Methylene Chloride	75-09-2	0.41 J	0.25	4.2		0.96
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.2		0.96

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15845 SDG#: DE051-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.11 U	0.11	4.2		0.96
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12 U	0.12	4.2		0.96
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.2		0.96
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.2		0.96
06192	Toluene	108-88-3	0.13 J	0.08	4.2		0.96
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.2		0.96
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.2		0.96
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.2		0.96
06192	1,1,2-Trichloroethane	79-00-5	0.29 U	0.29	4.2		0.96
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.2		0.96
06192	Trichlorofluoromethane	75-69-4	0.31 U	0.31	4.2		0.96
06192	1,2,3-Trichloropropane	96-18-4	0.35 U	0.35	4.2		0.96
06192	1,2,4-Trimethylbenzene	95-63-6	0.42 U	0.42	4.2		0.96
06192	1,3,5-Trimethylbenzene	108-67-8	0.11 U	0.11	4.2		0.96
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.2		0.96
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.2		0.96
06192	o-Xylene	95-47-6	0.18 U	0.18	4.2		0.96
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.5 U	5.5	17		24.85
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	74	U 74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15845 SDG#: DE051-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U 74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	74	U 74	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74	U 0.74	1.8		1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.8		1
10138	Anthracene	120-12-7	0.37	U 0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.74	U 0.74	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.74	U 0.74	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.74	U 0.74	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.74	U 0.74	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.74	U 0.74	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.7	U 6.7	20		1
10138	Di-n-butylphthalate	84-74-2	8.2	J 6.7	20		1
10138	Chrysene	218-01-9	0.37	U 0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.74	U 0.74	1.8		1
10138	Diethylphthalate	84-66-2	6.7	U 6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U 6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.7	U 6.7	20		1
10138	Fluoranthene	206-44-0	0.74	U 0.74	1.8		1
10138	Fluorene	86-73-7	0.74	U 0.74	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74	U 0.74	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.74	U 0.74	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.74	U 0.74	1.8		1
10138	Naphthalene	91-20-3	0.74	U 0.74	1.8		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15845 SDG#: DE051-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	N-Nitrosodimethylamine	62-75-9	0.74 U	0.74	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.7 U	6.7	20		1
10138	Phenanthrene	85-01-8	0.74 U	0.74	1.8		1
10138	Pyrene	129-00-0	0.74 U	0.74	1.8		1
Perchlorate SW-846 6850 1/2007							
06557	6a Perchlorate EPA 6850	14797-73-0	2.3 U	2.3	5.5		1
Pesticides/PCBs SW-846 8082							
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.55 U	0.55	1.9		1
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9		1
10225	PCB-1242	53469-21-9	0.55 U	0.55	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37 U	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1
Metals SW-846 6010B							
01643	Aluminum	7429-90-5	14,700	5.58	22.2		1
07914	Boron	7440-42-8	3.92 J	0.987	5.54		1
01650	Calcium	7440-70-2	1,970	6.80	22.2		1
01654	Iron	7439-89-6	18,700	5.22	22.2		1
01656	Lithium	7439-93-2	22.7	0.24	2.2		1
01657	Magnesium	7439-95-4	3,790	2.82	11.1		1
06958	Manganese	7439-96-5	300	0.0865	0.554		1
10145	Phosphorus	7723-14-0	397	0.621	11.1		1
01662	Potassium	7440-09-7	3,350	20.0	55.4		1
01667	Sodium	7440-23-5	111	41.4	111		1
07968	Strontium	7440-24-6	15.6	0.0687	0.554		1
06969	Tin	7440-31-5	2.35 J	1.11	11.1		1
06970	Titanium	7440-32-6	1,050	0.421	1.11		1
10146	Zirconium	7440-67-7	2.09 J	0.931	5.54		1
SW-846 6020							
06124	Antimony	7440-36-0	0.0659 U	0.0659	0.220		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.34	0.0659	0.439		2
06126	Barium	7440-39-3	97.7	0.119	0.439		2
06127	Beryllium	7440-41-7	0.631	0.0176	0.110		2
06128	Cadmium	7440-43-9	0.183	0.0395	0.110		2
06131	Chromium	7440-47-3	18.5	0.132	0.439		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15845 SDG#: DE051-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06132	Cobalt	7440-48-4	7.13	0.0220	0.110		2
06133	Copper	7440-50-8	11.1	0.0724	0.439		2
06135	Lead	7439-92-1	6.78	0.0114	0.220		2
06138	Molybdenum	7439-98-7	0.609	0.0549	0.110		2
06139	Nickel	7440-02-0	13.6	0.110	0.439		2
06141	Selenium	7782-49-2	0.162 J	0.0439	0.439		2
06142	Silver	7440-22-4	0.0396 J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.286	0.0329	0.110		2
06148	Vanadium	7440-62-2	38.5	0.0241	0.110		2
06149	Zinc	7440-66-6	61.4	0.615	3.29		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0048 J	0.0031	0.107		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4	0.89	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.3		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.51 J	0.22	1.1		1
		ASTM D1498	mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	490	10.0	10.0		1
		The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.33	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	9.8	0.50	0.50		1
		"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-158-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15845 SDG#: DE051-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010 17:54	Chelsea B Eastep	0.96
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010 11:31	Jason M Long	24.85
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:41	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035723411	12/23/2010 17:56	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010 17:39	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 10:57	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 17:09	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110040016A	01/05/2011 16:44	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 09:35	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	110040016A	01/05/2011 09:45	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:23	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:48	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:23	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:23	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15845 SDG#: DE051-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:48	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:38	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 15:30	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 01:56	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 22:28	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173176
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15891 SDG#: DE051-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190		1
04688	4-Chloroaniline	106-47-8	74	U 74	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	740	U 740	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	74	U 74	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	37	U 37	190		1
04688	4-Methylphenol	106-44-5	37	U 37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	37	U 37	190		1
04688	4-Nitroaniline	100-01-6	74	U 74	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenol	108-95-2	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173176
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15891 SDG#: DE051-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74	U 0.74	1.9		1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.9		1
10138	Anthracene	120-12-7	0.37	U 0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.74	U 0.74	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.74	U 0.74	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.74	U 0.74	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.74	U 0.74	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.74	U 0.74	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.7	U 6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7	U 6.7	20		1
10138	Chrysene	218-01-9	0.37	U 0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.74	U 0.74	1.9		1
10138	Diethylphthalate	84-66-2	6.7	U 6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U 6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.4	J 6.7	20		1
10138	Fluoranthene	206-44-0	0.74	U 0.74	1.9		1
10138	Fluorene	86-73-7	0.74	U 0.74	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74	U 0.74	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.74	U 0.74	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.74	U 0.74	1.9		1
10138	Naphthalene	91-20-3	0.74	U 0.74	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.74	U 0.74	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7	U 6.7	20		1
10138	Phenanthrene	85-01-8	0.74	U 0.74	1.9		1
10138	Pyrene	129-00-0	0.74	U 0.74	1.9		1
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U 1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U 1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U 1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U 0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U 0.56	1.9		1
10225	PCB-1232	11141-16-5	0.58	U 0.58	1.9		1
10225	PCB-1242	53469-21-9	0.56	U 0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U 0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37	U 0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37	U 0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U 0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U 0.37	1.9		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,800	5.55	22.1		1
07914	Boron	7440-42-8	3.90	J 0.982	5.52		1
01650	Calcium	7440-70-2	2,050	6.77	22.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173176
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15891 SDG#: DE051-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01654	Iron	7439-89-6	17,900	5.20	22.1		1
01656	Lithium	7439-93-2	19.5	0.24	2.2		1
01657	Magnesium	7439-95-4	3,380	2.80	11.0		1
06958	Manganese	7439-96-5	268	0.0861	0.552		1
10145	Phosphorus	7723-14-0	246	0.618	11.0		1
01662	Potassium	7440-09-7	2,390	19.9	55.2		1
01667	Sodium	7440-23-5	96.7 J	41.2	110		1
07968	Strontium	7440-24-6	19.5	0.0684	0.552		1
06969	Tin	7440-31-5	2.36 J	1.10	11.0		1
06970	Titanium	7440-32-6	1,020	0.419	1.10		1
10146	Zirconium	7440-67-7	2.05 J	0.927	5.52		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0651 J	0.0643	0.214		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.63	0.0643	0.429		2
06126	Barium	7440-39-3	107	0.116	0.429		2
06127	Beryllium	7440-41-7	0.738	0.0172	0.107		2
06128	Cadmium	7440-43-9	0.128	0.0386	0.107		2
06131	Chromium	7440-47-3	20.2	0.129	0.429		2
06132	Cobalt	7440-48-4	7.28	0.0214	0.107		2
06133	Copper	7440-50-8	11.5	0.0729	0.442		2
06135	Lead	7439-92-1	6.86	0.0111	0.214		2
06138	Molybdenum	7439-98-7	0.629	0.0536	0.107		2
06139	Nickel	7440-02-0	14.1	0.107	0.429		2
06141	Selenium	7782-49-2	0.104 J	0.0429	0.429		2
06142	Silver	7440-22-4	0.0339 J	0.0129	0.107		2
06145	Thallium	7440-28-0	0.311	0.0322	0.107		2
06148	Vanadium	7440-62-2	43.5	0.0243	0.110		2
06149	Zinc	7440-66-6	49.9	0.600	3.22		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.106		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.1	0.89	1.1		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.0 U	10.0	33.4		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.50 J	0.22	1.1		1
	ASTM D1498		mV	mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	446	10.0	10.0		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173176
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15891 SDG#: DE051-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		ASTM D1498	mV	mV	mV	mV	
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.02	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	10.3	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 11:31	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/14/2011 07:41	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 09:54	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:45	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173176
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

15891 SDG#: DE051-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:26	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:49	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:26	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:26	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:49	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:40	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 15:44	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 02:19	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 22:40	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.3 U	6.3	7.5		0.82
06192	Benzene	71-43-2	0.09 U	0.09	3.7		0.82
06192	Bromobenzene	108-86-1	0.12 U	0.12	3.7		0.82
06192	Bromochloromethane	74-97-5	0.31 U	0.31	3.7		0.82
06192	Bromodichloromethane	75-27-4	0.07 U	0.07	3.7		0.82
06192	Bromoform	75-25-2	0.37 U	0.37	3.7		0.82
06192	Bromomethane	74-83-9	0.23 U	0.23	3.7		0.82
06192	2-Butanone	78-93-3	1.1 U	1.1	7.5		0.82
06192	n-Butylbenzene	104-51-8	0.11 U	0.11	3.7		0.82
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	3.7		0.82
06192	tert-Butylbenzene	98-06-6	0.15 U	0.15	3.7		0.82
06192	Carbon Tetrachloride	56-23-5	0.13 U	0.13	3.7		0.82
06192	Chlorobenzene	108-90-7	0.10 U	0.10	3.7		0.82
06192	Chloroethane	75-00-3	0.12 U	0.12	3.7		0.82
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.28 U	0.28	3.7		0.82
06192	Chloroform	67-66-3	0.11 U	0.11	3.7		0.82
06192	Chloromethane	74-87-3	0.31 U	0.31	3.7		0.82
06192	2-Chlorotoluene	95-49-8	0.13 U	0.13	3.7		0.82
06192	4-Chlorotoluene	106-43-4	0.13 U	0.13	3.7		0.82
06192	Chlorotrifluoroethene	79-38-9	0.47 U	0.47	4.7		0.82
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.66 U	0.66	3.7		0.82
06192	Dibromochloromethane	124-48-1	0.19 U	0.19	3.7		0.82
06192	1,2-Dibromoethane	106-93-4	0.16 U	0.16	3.7		0.82
06192	Dibromomethane	74-95-3	0.22 U	0.22	3.7		0.82
06192	1,2-Dichlorobenzene	95-50-1	0.08 U	0.08	3.7		0.82
06192	1,3-Dichlorobenzene	541-73-1	0.11 U	0.11	3.7		0.82
06192	1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	3.7		0.82
06192	Dichlorodifluoromethane	75-71-8	0.11 U	0.11	3.7		0.82
06192	1,1-Dichloroethane	75-34-3	0.09 U	0.09	3.7		0.82
06192	1,2-Dichloroethane	107-06-2	0.14 U	0.14	3.7		0.82
06192	1,1-Dichloroethene	75-35-4	0.36 U	0.36	3.7		0.82
06192	cis-1,2-Dichloroethene	156-59-2	0.18 U	0.18	3.7		0.82
06192	trans-1,2-Dichloroethene	156-60-5	0.11 U	0.11	3.7		0.82
06192	1,2-Dichloropropane	78-87-5	0.16 U	0.16	3.7		0.82
06192	1,3-Dichloropropane	142-28-9	0.07 U	0.07	3.7		0.82
06192	2,2-Dichloropropane	594-20-7	0.16 U	0.16	3.7		0.82
06192	1,1-Dichloropropene	563-58-6	0.12 U	0.12	3.7		0.82
06192	cis-1,3-Dichloropropene	10061-01-5	0.15 U	0.15	3.7		0.82
06192	trans-1,3-Dichloropropene	10061-02-6	0.16 U	0.16	3.7		0.82
06192	Ethylbenzene	100-41-4	0.06 U	0.06	3.7		0.82
06192	Freon 113	76-13-1	0.10 U	0.10	3.7		0.82
06192	Freon 133a	75-88-7	0.47 U	0.47	4.7		0.82
06192	Hexachlorobutadiene	87-68-3	0.13 U	0.13	3.7		0.82
06192	2-Hexanone	591-78-6	1.5 U	1.5	7.5		0.82
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	3.7		0.82
06192	p-Isopropyltoluene	99-87-6	0.10 U	0.10	3.7		0.82
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20 U	0.20	3.7		0.82
06192	4-Methyl-2-pentanone	108-10-1	0.36 U	0.36	7.5		0.82
06192	Methylene Chloride	75-09-2	0.38 J	0.22	3.7		0.82
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	3.7		0.82

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.09 U	0.09	3.7		0.82
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.10 U	0.10	3.7		0.82
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22 U	0.22	3.7		0.82
06192	Tetrachloroethene	127-18-4	0.19 U	0.19	3.7		0.82
06192	Toluene	108-88-3	0.1 J	0.07	3.7		0.82
06192	1,2,3-Trichlorobenzene	87-61-6	0.13 U	0.13	3.7		0.82
06192	1,2,4-Trichlorobenzene	120-82-1	0.17 U	0.17	3.7		0.82
06192	1,1,1-Trichloroethane	71-55-6	0.19 U	0.19	3.7		0.82
06192	1,1,2-Trichloroethane	79-00-5	0.25 U	0.25	3.7		0.82
06192	Trichloroethene	79-01-6	0.14 U	0.14	3.7		0.82
06192	Trichlorofluoromethane	75-69-4	0.27 U	0.27	3.7		0.82
06192	1,2,3-Trichloropropane	96-18-4	0.31 U	0.31	3.7		0.82
06192	1,2,4-Trimethylbenzene	95-63-6	0.37 U	0.37	3.7		0.82
06192	1,3,5-Trimethylbenzene	108-67-8	0.09 U	0.09	3.7		0.82
06192	Vinyl Chloride	75-01-4	0.19 U	0.19	3.7		0.82
06192	m+p-Xylene	179601-23-1	0.16 U	0.16	3.7		0.82
06192	o-Xylene	95-47-6	0.16 U	0.16	3.7		0.82
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.5 U	4.5	13		19.5
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	95.4 U	95.4	191		5
Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.							
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U 760	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U 0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U 0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.87	J 0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U 0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U 0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	7.2	J 6.9	21		1
10138	Chrysene	218-01-9	2.2	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U 0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U 6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U 6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	15	J 6.9	21		1

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Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	Fluoranthene	206-44-0	0.76 U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76 U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.89 J	0.76	1.9		1
10138	Naphthalene	91-20-3	0.90 J	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21		1
10138	Phenanthrene	85-01-8	1.4 J	0.76	1.9		1
10138	Pyrene	129-00-0	0.78 J	0.76	1.9		1
GC Volatiles TPH GRO SW-846 8015B mod							
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1.2		25.93
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	86 U	86	170	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	57 U	57	170	1000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110 U	110	340	1000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110 U	110	340	1000000	1
10132	1,3-Dinitrobenzene	99-65-0	57 U	57	170	1000000	1
10132	2,4-Dinitrotoluene	121-14-2	57 U	57	170	1000000	1
10132	2,6-Dinitrotoluene	606-20-2	57 U	57	170	1000000	1
10132	HMX	2691-41-0	140 U	140	430	1000000	1
10132	Nitrobenzene	98-95-3	57 U	57	170	1000000	1
10132	Nitroglycerin	55-63-0	1,100 U	1,100	3,400	1000000	1
10132	2-Nitrotoluene	88-72-2	110 U	110	170	1000000	1
10132	3-Nitrotoluene	99-08-1	140 U	140	170	1000000	1
10132	4-Nitrotoluene	99-99-0	110 U	110	170	1000000	1
10132	PETN	78-11-5	1,100 U	1,100	3,400	1000000	1
10132	RDX	121-82-4	72 U	72	170	1000000	1
10132	Tetryl	479-45-8	88 U	88	170	1000000	1

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SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	57	U 57	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	57	U 57	170	10000000	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by 8315A	50-00-0	690	U 690	1,700		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U 1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U 1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U 1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U 0.38	1.9		1
10225	PCB-1221	11104-28-2	0.57	U 0.57	1.9		1
10225	PCB-1232	11141-16-5	0.59	U 0.59	1.9		1
10225	PCB-1242	53469-21-9	0.57	U 0.57	1.9		1
10225	PCB-1248	12672-29-6	0.38	U 0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U 0.38	1.9		1
10225	PCB-1260	11096-82-5	0.38	U 0.38	1.9		1
10225	PCB-1262	37324-23-5	0.38	U 0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U 0.38	1.9		1
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.46	U 0.46	1.4		1
10199	EFH (C15-C20)	n.a.	0.94	J 0.46	1.4		1
10199	EFH (C21-C30)	n.a.	18	0.46	1.4		1
10199	EFH (C30 - C40)	n.a.	53	0.46	1.4		1
10199	EFH (C8-C11)	n.a.	0.46	U 0.46	1.4		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110	U 110	570		1
10501	Isopropanol	67-63-0	110	U 110	570		1
10501	Methanol	67-56-1	110	U 110	570		1
Methanol was detected in the method blank at a concentration of 110 ug/kg. The sample was re-extracted and run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis. The data is reported from the second extraction. The methanol result for the original extraction is 150 ug/kg; the ethanol and isopropanol results for the original extraction are <100 ug/kg.							
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7	U 5.7	14		1
08283	Ethylene glycol	107-21-1	5.7	U 5.7	14		1
08283	Propylene glycol	57-55-6	5.7	U 5.7	14		1

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Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

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Reported: 02/01/2011 10:05

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls		SW-846 8015B	mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
Metals		SW-846 6010B	mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	22,700		5.48	21.8		1
07914	Boron	7440-42-8	16.4		0.970	5.45		1
01650	Calcium	7440-70-2	2,780		6.68	21.8		1
01654	Iron	7439-89-6	23,900		5.13	21.8		1
01656	Lithium	7439-93-2	27.5		0.24	2.2		1
01657	Magnesium	7439-95-4	4,170		2.77	10.9		1
06958	Manganese	7439-96-5	242		0.0850	0.545		1
10145	Phosphorus	7723-14-0	246		0.610	10.9		1
01662	Potassium	7440-09-7	2,180		19.6	54.5		1
01667	Sodium	7440-23-5	123		40.6	109		1
07968	Strontium	7440-24-6	25.8		0.0676	0.545		1
06969	Tin	7440-31-5	1.77	J	1.09	10.9		1
06970	Titanium	7440-32-6	1,090		0.414	1.09		1
10146	Zirconium	7440-67-7	2.17	J	0.915	5.45		1
		SW-846 6020	mg/kg		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.103	J	0.0680	0.227		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.								
06125	Arsenic	7440-38-2	5.98		0.0680	0.453		2
06126	Barium	7440-39-3	125		0.122	0.453		2
06127	Beryllium	7440-41-7	0.852		0.0181	0.113		2
06128	Cadmium	7440-43-9	0.191		0.0408	0.113		2
06131	Chromium	7440-47-3	24.0		0.136	0.453		2
06132	Cobalt	7440-48-4	5.32		0.0227	0.113		2
06133	Copper	7440-50-8	12.0		0.0748	0.453		2
06135	Lead	7439-92-1	7.28		0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.526		0.0566	0.113		2
06139	Nickel	7440-02-0	15.8		0.113	0.453		2
06141	Selenium	7782-49-2	0.163	J	0.0453	0.453		2
06142	Silver	7440-22-4	0.0394	J	0.0136	0.113		2
06145	Thallium	7440-28-0	0.307		0.0340	0.113		2
06148	Vanadium	7440-62-2	52.1		0.0249	0.113		2
06149	Zinc	7440-66-6	59.7		0.634	3.40		2
		SW-846 7471A	mg/kg		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031	U	0.0031	0.110		1
Wet Chemistry		EPA 300.0	mg/kg		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.92	U	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	17.9		0.92	1.7		1

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Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.3	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.41 J	0.23	1.1	mg/kg	1
SW-846 9012B							
05895	21a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.57	mg/kg	1
ASTM D1498							
01821	Oxidation Reduction Potential	n.a.	618	10.0	10.0	mV	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
SW-846 9045C modified							
00394	22a pH by 9045C	n.a.	5.91	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-145-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010 18:16	Chelsea B Eastep	0.82
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010 11:51	Jason M Long	19.5
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:48	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:56	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201035723411	12/23/2010 17:56	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010 17:45	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011 17:50	Timothy J Trees	5

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Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
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14545 SDG#: DE051-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 12:06	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/14/2011 08:13	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10357A34B	12/27/2010 21:04	Carrie E Miller	25.93
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:44	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103650008A	01/06/2011 07:21	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103610005A	12/29/2010 19:36	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 10:12	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103610005A	12/27/2010 15:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103650008A	01/03/2011 16:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 21:01	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103640014A	12/30/2010 17:56	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103630032A	12/29/2010 21:29	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103640012A	01/05/2011 11:04	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103640012A	12/31/2010 00:30	David V Hershey Jr	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103630032A	12/29/2010 17:00	Tyler O Griffin	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103640014A	12/30/2010 13:30	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

14545 SDG#: DE051-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:29	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:51	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:29	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:29	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:51	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:41	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 15:58	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11013013201B	01/14/2011 15:58	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 02:42	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11017243201A	01/20/2011 22:47	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	11004102201A	01/04/2011 19:09	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11004102201A	01/04/2011 09:15	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103B	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403B	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: TB-122210 Water
SSFL Area IV Collocated Soil Sampling
TB-122210

LLI Sample # WW 6173178
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

TB222 SDG#: DE051-16TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6 U	6	20		1
10904	Benzene	71-43-2	0.5 U	0.5	5		1
10904	Bromobenzene	108-86-1	1 U	1	5		1
10904	Bromochloromethane	74-97-5	1 U	1	5		1
10904	Bromodichloromethane	75-27-4	1 U	1	5		1
10904	Bromoform	75-25-2	1 U	1	5		1
10904	Bromomethane	74-83-9	1 U	1	5		1
10904	2-Butanone	78-93-3	3 U	3	10		1
10904	n-Butylbenzene	104-51-8	1 U	1	5		1
10904	sec-Butylbenzene	135-98-8	1 U	1	5		1
10904	tert-Butylbenzene	98-06-6	1 U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1 U	1	5		1
10904	Chlorobenzene	108-90-7	0.8 U	0.8	5		1
10904	Chloroethane	75-00-3	1 U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2 U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10904	Chloroform	67-66-3	0.8 U	0.8	5		1
10904	Chloromethane	74-87-3	1 U	1	5		1
10904	2-Chlorotoluene	95-49-8	1 U	1	5		1
10904	4-Chlorotoluene	106-43-4	1 U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2 U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2 U	2	5		1
10904	Dibromochloromethane	124-48-1	1 U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1 U	1	5		1
10904	Dibromomethane	74-95-3	1 U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2 U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1 U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1 U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8 U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8 U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8 U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1 U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1 U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1 U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1 U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1 U	1	5		1
10904	Ethylbenzene	100-41-4	0.8 U	0.8	5		1
10904	Freon 113	76-13-1	2 U	2	10		1
10904	Freon 133a	75-88-7	2 U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2 U	2	5		1
10904	2-Hexanone	591-78-6	3 U	3	10		1
10904	Isopropylbenzene	98-82-8	1 U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1 U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3 U	3	10		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: TB-122210 Water
SSFL Area IV Collocated Soil Sampling
TB-122210

LLI Sample # WW 6173178
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/01/2011 10:05

TB222 SDG#: DE051-16TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2 U	2	5		1
10904	n-Propylbenzene	103-65-1	1 U	1	5		1
10904	Styrene	100-42-5	1 U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8 U	0.8	5		1
10904	Toluene	108-88-3	0.7 U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1 U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8 U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8 U	0.8	5		1
10904	Trichloroethene	79-01-6	1 U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2 U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1 U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5		1
10904	Vinyl Chloride	75-01-4	1 U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8 U	0.8	5		1
10904	o-Xylene	95-47-6	0.8 U	0.8	5		1
GC/MS	Volatiles	SW-846 8260B SIM	ug/l	ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5 U	0.5	2.0		1
GC	Volatiles	TPH GRO SW-8015B	ug/l	ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y103631AA	12/29/2010 05:01	Frank A Valla, Jr	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103562AB	12/28/2010 12:47	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103562AB	12/28/2010 12:47	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y103631AA	12/29/2010 05:01	Frank A Valla, Jr	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	10363B20A	12/29/2010 20:57	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10363B20A	12/29/2010 20:57	Marie D John	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B103621AA Sample number(s): 6173165-6173166, 6173171, 6173174-6173175, 6173177									
Acetone	6.7 U	6.7	8.0	ug/kg	156	156	32-209	0	30
Benzene	0.10 U	0.10	4.0	ug/kg	102	100	80-120	2	30
Bromobenzene	0.13 U	0.13	4.0	ug/kg	89	89	79-120	1	30
Bromochloromethane	0.33 U	0.33	4.0	ug/kg	101	100	79-124	2	30
Bromodichloromethane	0.08 U	0.08	4.0	ug/kg	95	94	78-120	1	30
Bromoform	0.40 U	0.40	4.0	ug/kg	92	90	70-120	3	30
Bromomethane	0.25 U	0.25	4.0	ug/kg	71	72	32-162	1	30
2-Butanone	1.2 U	1.2	8.0	ug/kg	126	122	46-153	3	30
n-Butylbenzene	0.12 U	0.12	4.0	ug/kg	91	90	72-120	0	30
sec-Butylbenzene	0.06 U	0.06	4.0	ug/kg	91	90	75-120	2	30
tert-Butylbenzene	0.16 U	0.16	4.0	ug/kg	90	87	75-120	3	30
Carbon Tetrachloride	0.14 U	0.14	4.0	ug/kg	100	95	69-122	5	30
Chlorobenzene	0.11 U	0.11	4.0	ug/kg	94	94	80-120	0	30
Chloroethane	0.13 U	0.13	4.0	ug/kg	77	76	37-154	1	30
2-Chloroethyl Vinyl Ether	0.30 U	0.30	4.0	ug/kg	103	99	43-146	4	30
Chloroform	0.12 U	0.12	4.0	ug/kg	100	98	80-120	3	30
Chloromethane	0.33 U	0.33	4.0	ug/kg	86	83	54-132	3	30
2-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	90	90	78-120	1	30
4-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	91	92	79-120	1	30
Chlorotrifluoroethene	0.50 U	0.50	5.0	ug/kg	122	111	22-131	10	30
1,2-Dibromo-3-chloropropane	0.70 U	0.70	4.0	ug/kg	89	84	58-120	6	30
Dibromochloromethane	0.20 U	0.20	4.0	ug/kg	94	92	77-120	2	30
1,2-Dibromoethane	0.17 U	0.17	4.0	ug/kg	97	93	80-120	4	30
Dibromomethane	0.24 U	0.24	4.0	ug/kg	101	98	80-120	3	30
1,2-Dichlorobenzene	0.09 U	0.09	4.0	ug/kg	91	92	79-120	1	30
1,3-Dichlorobenzene	0.12 U	0.12	4.0	ug/kg	88	88	78-120	1	30
1,4-Dichlorobenzene	0.16 U	0.16	4.0	ug/kg	89	91	79-120	2	30
Dichlorodifluoromethane	0.12 U	0.12	4.0	ug/kg	71	66	20-120	7	30
1,1-Dichloroethane	0.10 U	0.10	4.0	ug/kg	100	98	80-120	2	30
1,2-Dichloroethane	0.15 U	0.15	4.0	ug/kg	100	98	71-129	2	30
1,1-Dichloroethene	0.39 U	0.39	4.0	ug/kg	97	93	73-123	5	30
cis-1,2-Dichloroethene	0.19 U	0.19	4.0	ug/kg	101	99	80-120	2	30
trans-1,2-Dichloroethene	0.12 U	0.12	4.0	ug/kg	101	97	79-120	3	30
1,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	99	99	80-120	0	30
1,3-Dichloropropane	0.08 U	0.08	4.0	ug/kg	96	93	80-120	3	30
2,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	98	95	72-123	3	30
1,1-Dichloropropene	0.13 U	0.13	4.0	ug/kg	99	95	77-120	4	30
cis-1,3-Dichloropropene	0.16 U	0.16	4.0	ug/kg	92	90	80-120	2	30
trans-1,3-Dichloropropene	0.17 U	0.17	4.0	ug/kg	89	86	77-120	3	30
Ethylbenzene	0.06 U	0.06	4.0	ug/kg	95	92	80-120	2	30
Freon 113	0.11 U	0.11	4.0	ug/kg	97	90	61-126	7	30
Freon 133a	0.50 U	0.50	5.0	ug/kg	94	90	78-120	5	30
Hexachlorobutadiene	0.14 U	0.14	4.0	ug/kg	87	85	57-120	2	30
2-Hexanone	1.6 U	1.6	8.0	ug/kg	81	79	45-155	2	30
Isopropylbenzene	0.06 U	0.06	4.0	ug/kg	94	91	76-120	3	30
p-Isopropyltoluene	0.11 U	0.11	4.0	ug/kg	91	90	75-120	1	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21 U	0.21	4.0	ug/kg	98	94	74-121	4	30
4-Methyl-2-pentanone	0.39 U	0.39	8.0	ug/kg	78	73	61-134	7	30
Methylene Chloride	0.39 J	0.24	4.0	ug/kg	96	94	76-124	2	30
n-Propylbenzene	0.07 U	0.07	4.0	ug/kg	95	93	77-120	2	30
Styrene	0.10 U	0.10	4.0	ug/kg	92	93	76-120	0	30
1,1,1,2-Tetrachloroethane	0.11 U	0.11	4.0	ug/kg	95	93	80-120	2	30
1,1,2,2-Tetrachloroethane	0.23 U	0.23	4.0	ug/kg	93	89	71-123	5	30
Tetrachloroethene	0.20 U	0.20	4.0	ug/kg	94	93	77-120	1	30
Toluene	0.17 J	0.08	4.0	ug/kg	97	94	80-120	2	30
1,2,3-Trichlorobenzene	0.14 U	0.14	4.0	ug/kg	84	88	64-120	4	30
1,2,4-Trichlorobenzene	0.18 U	0.18	4.0	ug/kg	81	86	68-120	6	30
1,1,1-Trichloroethane	0.20 U	0.20	4.0	ug/kg	100	97	71-125	3	30
1,1,2-Trichloroethane	0.27 U	0.27	4.0	ug/kg	96	93	80-120	3	30
Trichloroethene	0.15 U	0.15	4.0	ug/kg	97	96	80-120	1	30
Trichlorofluoromethane	0.29 U	0.29	4.0	ug/kg	83	79	58-133	5	30
1,2,3-Trichloropropane	0.33 U	0.33	4.0	ug/kg	93	89	71-123	4	30
1,2,4-Trimethylbenzene	0.40 U	0.40	4.0	ug/kg	91	91	79-120	0	30
1,3,5-Trimethylbenzene	0.10 U	0.10	4.0	ug/kg	91	92	78-120	1	30
Vinyl Chloride	0.20 U	0.20	4.0	ug/kg	83	80	53-120	4	30
m+p-Xylene	0.17 U	0.17	4.0	ug/kg	96	95	80-120	1	30
o-Xylene	0.18 J	0.17	4.0	ug/kg	90	90	80-120	0	30
Batch number: E103562AB	Sample number(s): 6173162,6173178								
1,4-Dioxane	0.5 U	0.5	2.0	ug/l	105	109	60-132	4	30
Batch number: E103631AA	Sample number(s): 6173165-6173166,6173171,6173174-6173175,6173177								
1,4-Dioxane	5.0 U	5.0	15	ug/kg	106	101	70-130	4	30
Batch number: Y103631AA	Sample number(s): 6173162,6173178								
Acetone	6 U	6.	20	ug/l	70	66	49-234	6	30
Benzene	0.5 U	0.5	5	ug/l	100	99	79-120	1	30
Bromobenzene	1 U	1.	5	ug/l	102	104	80-120	1	30
Bromochloromethane	1 U	1.	5	ug/l	97	97	80-120	1	30
Bromodichloromethane	1 U	1.	5	ug/l	92	92	80-120	0	30
Bromoform	1 U	1.	5	ug/l	90	91	61-120	1	30
Bromomethane	1 U	1.	5	ug/l	93	92	44-120	1	30
2-Butanone	3 U	3.	10	ug/l	91	88	66-151	3	30
n-Butylbenzene	1 U	1.	5	ug/l	100	98	74-120	2	30
sec-Butylbenzene	1 U	1.	5	ug/l	105	104	78-120	1	30
tert-Butylbenzene	1 U	1.	5	ug/l	99	96	80-120	3	30
Carbon Tetrachloride	1 U	1.	5	ug/l	94	93	75-123	1	30
Chlorobenzene	0.8 U	0.8	5	ug/l	95	96	80-120	0	30
Chloroethane	1 U	1.	5	ug/l	94	92	49-129	2	30
2-Chloroethyl Vinyl Ether	2 U	2.	10	ug/l	96	95	56-129	0	30
Chloroform	0.8 U	0.8	5	ug/l	98	99	77-122	1	30
Chloromethane	1 U	1.	5	ug/l	91	92	60-129	0	30
2-Chlorotoluene	1 U	1.	5	ug/l	102	101	80-120	1	30
4-Chlorotoluene	1 U	1.	5	ug/l	101	98	80-120	3	30
Chlorotrifluoroethene	2 U	2.	5	ug/l	101	98	38-136	3	30
1,2-Dibromo-3-chloropropane	2 U	2.	5	ug/l	90	93	66-120	2	30
Dibromochloromethane	1 U	1.	5	ug/l	90	90	80-120	0	30
1,2-Dibromoethane	1 U	1.	5	ug/l	97	97	80-120	0	30
Dibromomethane	1 U	1.	5	ug/l	98	95	80-120	2	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	95	94	80-120	1	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	101	100	80-120	1	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	98	97	80-120	0	30
Dichlorodifluoromethane	2 U	2.	5	ug/l	89	87	47-120	3	30
1,1-Dichloroethane	1 U	1.	5	ug/l	99	99	79-120	0	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1 U	1.	5	ug/l	97	96	70-130	1	30
1,1-Dichloroethene	0.8 U	0.8	5	ug/l	107	108	74-123	1	30
cis-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	101	101	80-120	0	30
trans-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	102	102	80-120	1	30
1,2-Dichloropropane	1 U	1.	5	ug/l	96	94	78-120	2	30
1,3-Dichloropropane	1 U	1.	5	ug/l	97	97	80-120	1	30
2,2-Dichloropropane	1 U	1.	5	ug/l	95	95	77-124	0	30
1,1-Dichloropropene	1 U	1.	5	ug/l	99	99	80-120	0	30
cis-1,3-Dichloropropene	1 U	1.	5	ug/l	91	89	80-120	2	30
trans-1,3-Dichloropropene	1 U	1.	5	ug/l	91	91	79-120	1	30
Ethylbenzene	0.8 U	0.8	5	ug/l	98	97	79-120	0	30
Freon 113	2 U	2.	10	ug/l	111	109	69-128	2	30
Freon 133a	2 U	2.	5	ug/l	97	93	77-120	3	30
Hexachlorobutadiene	2 U	2.	5	ug/l	90	92	58-120	2	30
2-Hexanone	3 U	3.	10	ug/l	95	96	65-136	0	30
Isopropylbenzene	1 U	1.	5	ug/l	98	97	77-120	1	30
p-Isopropyltoluene	1 U	1.	5	ug/l	104	102	80-120	2	30
Methyl Tertiary Butyl Ether	0.5 U	0.5	5	ug/l	98	99	76-120	1	30
4-Methyl-2-pentanone	3 U	3.	10	ug/l	95	93	70-121	3	30
Methylene Chloride	2 U	2.	5	ug/l	104	106	80-120	2	30
n-Propylbenzene	1 U	1.	5	ug/l	106	106	80-120	0	30
Styrene	1 U	1.	5	ug/l	101	100	80-120	1	30
1,1,1,2-Tetrachloroethane	1 U	1.	5	ug/l	94	93	80-120	1	30
1,1,2,2-Tetrachloroethane	1 U	1.	5	ug/l	98	99	71-120	0	30
Tetrachloroethene	0.8 U	0.8	5	ug/l	98	98	80-121	0	30
Toluene	0.7 U	0.7	5	ug/l	97	98	79-120	1	30
1,2,3-Trichlorobenzene	1 U	1.	5	ug/l	99	100	65-120	1	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	99	99	67-120	0	30
1,1,1-Trichloroethane	0.8 U	0.8	5	ug/l	97	97	75-127	0	30
1,1,2-Trichloroethane	0.8 U	0.8	5	ug/l	97	98	80-120	1	30
Trichloroethene	1 U	1.	5	ug/l	98	98	80-120	0	30
Trichlorofluoromethane	2 U	2.	5	ug/l	97	95	64-129	2	30
1,2,3-Trichloropropane	1 U	1.	5	ug/l	103	104	80-120	1	30
1,2,4-Trimethylbenzene	1 U	1.	5	ug/l	104	103	74-120	1	30
1,3,5-Trimethylbenzene	1 U	1.	5	ug/l	104	101	75-120	2	30
Vinyl Chloride	1 U	1.	5	ug/l	89	88	65-125	1	30
m+p-Xylene	0.8 U	0.8	5	ug/l	94	94	80-120	0	30
o-Xylene	0.8 U	0.8	5	ug/l	94	94	80-120	1	30

Batch number: 10362WAA026
N-Nitrosodimethylamine

Sample number(s): 6173162
1.95 0.500 1.00 ng/l

92 89 70-130 4 30

Batch number: 10362WAC026

Sample number(s): 6173161-6173162

Acenaphthene	0.010 U	0.010	0.050	ug/l	85	81	74-109	4	30
Acenaphthylene	0.010 U	0.010	0.050	ug/l	89	86	70-110	4	30
Anthracene	0.010 U	0.010	0.050	ug/l	88	87	66-111	1	30
Benzo(a)anthracene	0.010 U	0.010	0.050	ug/l	89	89	72-114	1	30
Benzo(a)pyrene	0.010 U	0.010	0.050	ug/l	84	84	64-115	1	30
Benzo(b)fluoranthene	0.010 U	0.010	0.050	ug/l	91	92	69-123	2	30
Benzo(g,h,i)perylene	0.010 U	0.010	0.050	ug/l	83	83	68-125	0	30
Benzo(k)fluoranthene	0.010 U	0.010	0.050	ug/l	82	82	72-122	0	30
Butylbenzylphthalate	0.056 J	0.050	1.0	ug/l	77	78	70-130	2	30
Di-n-butylphthalate	0.050 U	0.050	1.0	ug/l	91	90	70-130	1	30
Chrysene	0.010 U	0.010	0.050	ug/l	85	85	76-116	0	30
Dibenz(a,h)anthracene	0.010 U	0.010	0.050	ug/l	82	83	71-125	1	30
Diethylphthalate	0.050 U	0.050	1.0	ug/l	73	73	70-130	1	30
Dimethylphthalate	0.050 U	0.050	1.0	ug/l	66*	69*	70-130	5	30
Bis(2-Ethylhexyl)phthalate	0.056 J	0.050	1.0	ug/l	129	92	70-130	33*	30

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	0.010 U	0.010	0.050	ug/l	88	89	75-116	1	30
Fluorene	0.010 U	0.010	0.050	ug/l	92	89	75-114	3	30
Indeno(1,2,3-cd)pyrene	0.010 U	0.010	0.050	ug/l	83	83	69-124	0	30
1-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	87	82	71-117	5	30
2-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	78	75	75-115	4	30
Naphthalene	0.010 U	0.010	0.050	ug/l	83	80	72-109	3	30
N-Nitrosodimethylamine	0.010 U	0.010	0.050	ug/l	55*	51*	70-130	6	30
Di-n-octylphthalate	0.082 J	0.050	1.0	ug/l	83	77	70-130	8	30
Phenanthrene	0.010 U	0.010	0.050	ug/l	85	85	76-111	1	30
Pyrene	0.010 U	0.010	0.050	ug/l	88	89	69-118	1	30

Batch number: 10362WAE026

Sample number(s): 6173161-6173162

Aniline	1	U	1.	5	ug/l	73	68	49-101	7	30
Benidine	20	U	20.	60	ug/l	55	56	20-109	2	30
Benzoic acid	6	U	6.	15	ug/l	51	47	10-69	10	30
Benzyl alcohol	5	U	5.	15	ug/l	85	83	66-97	2	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	95	94	82-117	1	30
Carbazole	1	U	1.	5	ug/l	102	101	81-114	2	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	98	99	70-123	1	30
4-Chloroaniline	1	U	1.	5	ug/l	53	43	42-124	21	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	96	95	74-124	1	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	96	97	77-108	1	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	93	93	62-127	1	30
2-Chloronaphthalene	2	U	2.	5	ug/l	83	82	54-132	1	30
2-Chlorophenol	1	U	1.	5	ug/l	99	97	77-108	1	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	96	99	82-111	2	30
Dibenzofuran	1	U	1.	5	ug/l	100	100	83-108	1	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	79	81	67-108	3	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	75	78	63-110	4	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	77	79	65-113	3	30
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	68	62	49-111	8	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	104	99	80-109	5	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	101	98	72-110	3	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	109	107	70-130	1	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	84	86	78-119	2	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	82	84	64-120	3	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	102	101	81-115	1	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	98	100	85-115	2	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	101	99	78-116	2	30
Hexachlorobenzene	1	U	1.	5	ug/l	99	99	81-118	1	30
Hexachlorobutadiene	1	U	1.	5	ug/l	77	80	57-124	3	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	65	64	10-118	1	30
Hexachloroethane	1	U	1.	5	ug/l	70	71	52-113	0	30
Isophorone	1	U	1.	5	ug/l	99	96	74-117	3	30
2-Methylphenol	1	U	1.	5	ug/l	99	98	64-101	1	30
4-Methylphenol	2	U	2.	5	ug/l	86	86	61-103	1	30
2-Nitroaniline	1	U	1.	5	ug/l	102	100	83-116	2	30
3-Nitroaniline	1	U	1.	5	ug/l	98	95	74-113	2	30
4-Nitroaniline	1	U	1.	5	ug/l	84	84	59-100	0	30
Nitrobenzene	1	U	1.	5	ug/l	99	97	75-109	2	30
2-Nitrophenol	1	U	1.	5	ug/l	100	98	86-120	2	30
4-Nitrophenol	10	U	10.	30	ug/l	45	43	16-78	5	30
N-Nitroso-di-n-propylamine	1	U	1.	5	ug/l	98	98	69-110	0	30
N-Nitrosodiphenylamine	2	U	2.	5	ug/l	98	98	67-136	0	30
Pentachlorophenol	3	U	3.	15	ug/l	83	83	53-110	0	30
Phenol	1	U	1.	5	ug/l	52	50	29-67	4	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	87	88	71-112	1	30
2,4,5-Trichlorophenol	1	U	1.	5	ug/l	102	99	79-107	3	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
2,4,6-Trichlorophenol	1 U	1.	5	ug/l	103	102	81-113	0	30
Batch number: 10363SLG026	Sample number(s): 6173165-6173166, 6173171, 6173177								
N-Nitrosodimethylamine	16.7 U	16.7	33.3	ng/kg	93		70-130		
Batch number: 10363SLK026	Sample number(s): 6173160, 6173163-6173169, 6173171-6173177								
Acenaphthene	17 U	17.	170	ug/kg	98		76-111		
Acenaphthylene	17 U	17.	170	ug/kg	101		75-122		
Aniline	170 U	170.	500	ug/kg	47		10-107		
Anthracene	17 U	17.	170	ug/kg	100		76-112		
Benzidine	1,200 U	1,200.	3,300	ug/kg	44		15-121		
Benzo(a)anthracene	17 U	17.	170	ug/kg	98		73-112		
Benzo(a)pyrene	17 U	17.	170	ug/kg	89		69-122		
Benzo(b)fluoranthene	17 U	17.	170	ug/kg	88		61-127		
Benzo(g,h,i)perylene	17 U	17.	170	ug/kg	85		65-122		
Benzo(k)fluoranthene	17 U	17.	170	ug/kg	88		67-125		
Benzoic acid	170 U	170.	500	ug/kg	96		10-154		
Benzyl alcohol	170 U	170.	500	ug/kg	90		68-111		
4-Bromophenyl-phenylether	17 U	17.	170	ug/kg	94		79-117		
Butylbenzylphthalate	17 U	17.	170	ug/kg	98		75-115		
Di-n-butylphthalate	17 U	17.	170	ug/kg	101		79-112		
Carbazole	17 U	17.	170	ug/kg	102		77-113		
4-Chloro-3-methylphenol	33 U	33.	170	ug/kg	101		74-119		
4-Chloroaniline	67 U	67.	170	ug/kg	60		10-110		
bis(2-Chloroethoxy)methane	17 U	17.	170	ug/kg	98		70-118		
bis(2-Chloroethyl)ether	17 U	17.	170	ug/kg	87		70-104		
bis(2-Chloroisopropyl)ether	17 U	17.	170	ug/kg	86		68-131		
2-Chloronaphthalene	17 U	17.	170	ug/kg	84		67-127		
2-Chlorophenol	17 U	17.	170	ug/kg	97		72-112		
4-Chlorophenyl-phenylether	33 U	33.	170	ug/kg	100		79-110		
Chrysene	17 U	17.	170	ug/kg	95		76-113		
Dibenz(a,h)anthracene	17 U	17.	170	ug/kg	87		70-128		
Dibenzofuran	17 U	17.	170	ug/kg	99		79-108		
1,2-Dichlorobenzene	17 U	17.	170	ug/kg	89		79-102		
1,3-Dichlorobenzene	17 U	17.	170	ug/kg	86		70-98		
1,4-Dichlorobenzene	17 U	17.	170	ug/kg	86		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	41		38-105		
2,4-Dichlorophenol	17 U	17.	170	ug/kg	102		75-111		
Diethylphthalate	17 U	17.	170	ug/kg	101		76-111		
2,4-Dimethylphenol	33 U	33.	170	ug/kg	100		72-111		
3,5-Dimethylphenol	33 U	33.	170	ug/kg	107		70-130		
Dimethylphthalate	17 U	17.	170	ug/kg	98		77-109		
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	89		53-110		
2,4-Dinitrophenol	670 U	670.	2,000	ug/kg	87		37-120		
2,4-Dinitrotoluene	33 U	33.	170	ug/kg	106		73-115		
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	105		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	102		77-111		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	99		75-117		
Fluoranthene	17 U	17.	170	ug/kg	107		78-116		
Fluorene	17 U	17.	170	ug/kg	98		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	97		78-116		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Hexachlorobutadiene	67	U	67.	170	ug/kg	101	70-112		
Hexachlorocyclopentadiene	170		170.	500	ug/kg	104	46-115		
Hexachloroethane	17	U	17.	170	ug/kg	90	68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	87	64-119		
Isophorone	17	U	17.	170	ug/kg	94	69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	98	74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	91	76-105		
2-Methylphenol	33	U	33.	170	ug/kg	95	66-110		
4-Methylphenol	33	U	33.	170	ug/kg	94	66-117		
Naphthalene	17	U	17.	170	ug/kg	92	73-106		
2-Nitroaniline	17	U	17.	170	ug/kg	107	78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	94	62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	71	49-98		
Nitrobenzene	17	U	17.	170	ug/kg	101	71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	98	81-114		
4-Nitrophenol	170		170.	500	ug/kg	109	56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	90	63-107		
N-Nitrosodimethylamine	33	U	33.	170	ug/kg	77	60-106		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	97	67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	91	68-130		
Pentachlorophenol	170		170.	500	ug/kg	84	35-106		
Phenanthrene	17	U	17.	170	ug/kg	99	77-113		
Phenol	17	U	17.	170	ug/kg	95	58-112		
Pyrene	17	U	17.	170	ug/kg	96	75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	99	73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	103	76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	106	78-111		
Batch number: 10365SLA026 Sample number(s): 6173160,6173163-6173169,6173171-6173177									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	89	63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	91	60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	88	55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	95	74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	89	58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	102	63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	95	44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	92	66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	108	65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	114	84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	91	79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	92	62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	111	68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	104	70-130		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	137	67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	84	78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	94	71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	90	62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	92	72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	88	62-120		
Naphthalene	0.67	U	0.67	1.7	ug/kg	87	67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	95	39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	103	55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	90	75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	88	56-121		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10357A34B	Sample number(s): 6173165-6173166, 6173171, 6173177								
9a TPH by EPA 8015B Gas C5-C12	0.2	U 0.2	1.0	mg/kg	68	75	67-119	9	30
Batch number: 10363B20A	Sample number(s): 6173162, 6173178								
TPH-GRO S.CA water C5-C12	20	U 20.	50	ug/l	100	109	75-135	9	30
Batch number: 103610006A	Sample number(s): 6173162								
4-Amino-2,6-Dinitrotoluene	0.30	U 0.30	0.60	ug/l	95	91	80-120	4	30
2-Amino-4,6-Dinitrotoluene	0.20	U 0.20	0.60	ug/l	92	89	80-120	3	30
2,6-Diamino-4-nitrotoluene	0.20	U 0.20	0.60	ug/l	80	83	75-125	4	30
2,4-Diamino-6-nitrotoluene	0.20	U 0.20	0.60	ug/l	80	83	75-125	4	30
1,3-Dinitrobenzene	0.20	U 0.20	0.60	ug/l	91	89	72-117	2	30
2,4-Dinitrotoluene	0.20	U 0.20	0.60	ug/l	90	88	80-120	2	30
2,6-Dinitrotoluene	0.20	U 0.20	0.60	ug/l	100	97	80-120	3	30
HMX	0.65	U 0.65	2.0	ug/l	83	83	65-125	0	30
Nitrobenzene	0.20	U 0.20	0.60	ug/l	85	83	75-121	2	30
Nitroglycerin	5.2	U 5.2	15	ug/l	83	83	80-120	0	30
2-Nitrotoluene	0.20	U 0.20	0.60	ug/l	93	90	74-120	3	30
3-Nitrotoluene	0.40	U 0.40	1.2	ug/l	92	90	69-107	2	30
4-Nitrotoluene	0.60	U 0.60	1.2	ug/l	93	91	80-120	2	30
PETN	6.0	U 6.0	18	ug/l	100	96	80-120	4	30
RDX	0.20	U 0.20	0.60	ug/l	81	82	70-125	1	30
Tetryl	0.40	U 0.40	0.60	ug/l	110	100	33-147	10	30
1,3,5-Trinitrobenzene	0.20	U 0.20	0.60	ug/l	91	90	53-129	1	30
2,4,6-Trinitrotoluene	0.20	U 0.20	0.60	ug/l	94	92	76-109	2	30
Batch number: 103650008A	Sample number(s): 6173165-6173166, 6173171, 6173177								
4-Amino-2,6-Dinitrotoluene	75	U 75.	150	ug/kg	116		80-120		
2-Amino-4,6-Dinitrotoluene	50	U 50.	150	ug/kg	117		80-120		
2,6-Diamino-4-nitrotoluene	100	U 100.	300	ug/kg	100	96	54-134	4	30
2,4-Diamino-6-nitrotoluene	100	U 100.	300	ug/kg	99	95	54-134	4	30
1,3-Dinitrobenzene	50	U 50.	150	ug/kg	113		51-171		
2,4-Dinitrotoluene	50	U 50.	150	ug/kg	112		72-135		
2,6-Dinitrotoluene	50	U 50.	150	ug/kg	116		80-120		
HMX	130	U 130.	380	ug/kg	106		74-130		
Nitrobenzene	50	U 50.	150	ug/kg	112		80-120		
Nitroglycerin	1,000	U 1,000.	3,000	ug/kg	100		80-120		
2-Nitrotoluene	100	U 100.	150	ug/kg	117		78-128		
3-Nitrotoluene	130	U 130.	150	ug/kg	117		73-127		
4-Nitrotoluene	100	U 100.	150	ug/kg	116		80-120		
PETN	1,000	U 1,000.	3,000	ug/kg	115		80-120		
RDX	63	U 63.	150	ug/kg	111		75-131		
Tetryl	77	U 77.	150	ug/kg	136		70-168		
1,3,5-Trinitrobenzene	50	U 50.	150	ug/kg	127		77-137		
2,4,6-Trinitrotoluene	50	U 50.	150	ug/kg	118		80-120		
Batch number: 103560024A	Sample number(s): 6173162								
17b Formaldehyde by 8315A	10	U 10.	50	ug/l	88	96	69-130	9	30
Batch number: 103610005A	Sample number(s): 6173165-6173166, 6173171, 6173177								

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
17a Formaldehyde by 8315A	600 U	600.	1,500	ug/kg	99		80-126		
Batch number: 103620008A	Sample number(s): 6173161-6173162								
2,4-D	0.16 U	0.16	0.50	ug/l	120	120	45-128	0	30
Dalapon	0.25 U	0.25	1.3	ug/l	97	98	40-100	2	30
2,4-DB	0.30 U	0.30	1.0	ug/l	112	108	41-138	4	30
Dicamba	0.080 U	0.080	0.30	ug/l	108	104	51-144	4	30
Dinoseb	0.10 U	0.10	0.50	ug/l	60	49	23-93	21	30
2,4-DP (Dichlorprop)	0.16 U	0.16	0.50	ug/l	160*	156*	72-145	3	30
MCPA	300 U	300.	1,000	ug/l	100	98	69-129	2	30
MCPP	50 U	50.	200	ug/l	104	100	66-132	4	30
2,4,5-T	0.015 U	0.015	0.050	ug/l	76	84	53-141	10	30
2,4,5-TP	0.010 U	0.010	0.050	ug/l	108	108	56-135	0	30
Batch number: 110040014A	Sample number(s): 6173160,6173163-6173169,6173171-6173173								
2,4-D	1.2 U	1.2	3.6	ug/kg	78		40-140		
Dalapon	4.4 U	4.4	9.0	ug/kg	56		24-89		
2,4-DB	1.1 J	0.62	1.7	ug/kg	57		34-138		
Dicamba	0.40 U	0.40	1.2	ug/kg	69		20-164		
Dinoseb	0.80 U	0.80	2.4	ug/kg	5*		10-36		
2,4-DP (Dichlorprop)	0.80 U	0.80	1.7	ug/kg	63		60-141		
MCPA	76 U	76.	250	ug/kg	54		34-113		
MCPP (Mecoprop)	75 U	75.	250	ug/kg	48		29-154		
2,4,5-T	0.082 U	0.082	0.17	ug/kg	72		33-145		
2,4,5-TP	0.075 U	0.075	0.17	ug/kg	53		48-138		
Batch number: 110040016A	Sample number(s): 6173164,6173175								
6a Perchlorate EPA 6850	2.1 U	2.1	5.0	ug/kg	105		85-115		
Batch number: 103570023A	Sample number(s): 6173161-6173162								
Aldrin	0.0020 U	0.0020	0.010	ug/l	111	111	54-159	0	30
Alpha BHC	0.0030 U	0.0030	0.010	ug/l	133	133	59-146	0	30
Beta BHC	0.0029 U	0.0029	0.010	ug/l	124	134	73-147	8	30
Gamma BHC - Lindane	0.0020 U	0.0020	0.010	ug/l	111	121	68-128	9	30
Chlordane	0.12 U	0.12	0.50	ug/l					
p,p-DDD	0.0050 U	0.0050	0.020	ug/l	115	125	71-139	8	30
p,p-DDE	0.0050 U	0.0050	0.020	ug/l	126	137*	66-130	8	30
p,p-DDT	0.0050 U	0.0050	0.020	ug/l	110	120	53-126	9	30
Delta BHC	0.0029 U	0.0029	0.010	ug/l	113	113	76-148	0	30
Dieldrin	0.0053 U	0.0053	0.020	ug/l	115	120	76-132	4	30
Endosulfan I	0.0043 U	0.0043	0.010	ug/l	93	99	68-128	6	30
Endosulfan II	0.015 U	0.015	0.020	ug/l	105	110	59-144	5	30
Endosulfan Sulfate	0.0058 U	0.0058	0.020	ug/l	125	125	71-142	0	30
Endrin	0.0081 U	0.0081	0.020	ug/l	105	120	52-132	13	30
Endrin Aldehyde	0.020 U	0.020	0.10	ug/l	125	130	68-139	4	20
Endrin Ketone	0.0050 U	0.0050	0.020	ug/l	120	125	69-146	4	30
Heptachlor	0.0026 U	0.0026	0.010	ug/l	102	102	57-126	0	30
Heptachlor Epoxide	0.0023 U	0.0023	0.010	ug/l	122	122	73-156	0	30
Methoxychlor	0.030 U	0.030	0.10	ug/l	120	130	52-133	8	30
Mirex	0.085 U	0.085	0.25	ug/l					
Toxaphene	1.0 U	1.0	3.0	ug/l					
Batch number: 103570024A	Sample number(s): 6173161-6173162								
Aroclor 5432	0.10 U	0.10	0.50	ug/l					
Aroclor 5442	0.10 U	0.10	0.50	ug/l	56*	64*	75-125	13	30
Aroclor 5460	0.10 U	0.10	0.50	ug/l					

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1016	0.10 U	0.10	0.50	ug/l	110	114	68-119	4	30
PCB-1221	0.10 U	0.10	0.50	ug/l					
PCB-1232	0.20 U	0.20	0.50	ug/l					
PCB-1242	0.10 U	0.10	0.50	ug/l					
PCB-1248	0.10 U	0.10	0.50	ug/l					
PCB-1254	0.10 U	0.10	0.50	ug/l					
PCB-1260	0.10 U	0.10	0.50	ug/l	124*	142*	68-121	14	30
PCB-1262	0.20 U	0.20	0.50	ug/l					
PCB-1268	0.16 U	0.16	0.50	ug/l					

Batch number: 103640029A	Sample number(s): 6173160, 6173163-6173169, 6173171-6173177								
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	85	87	75-125	2	30
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	97		72-120		
PCB-1221	0.50 U	0.50	1.7	ug/kg					
PCB-1232	0.52 U	0.52	1.7	ug/kg					
PCB-1242	0.50 U	0.50	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.33 U	0.33	1.7	ug/kg	127		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					

Batch number: 103650029A	Sample number(s): 6173160, 6173163-6173169, 6173171-6173173								
Aldrin	0.066 U	0.066	0.17	ug/kg	139*		44-135		
Alpha BHC	0.034 U	0.034	0.17	ug/kg	85		38-130		
Beta BHC	0.060 U	0.060	0.17	ug/kg	116		56-134		
Gamma BHC - Lindane	0.034 U	0.034	0.17	ug/kg	91		46-127		
Chlordane	0.80 U	0.80	3.4	ug/kg					
p,p-DDD	0.066 U	0.066	0.34	ug/kg	100		60-137		
p,p-DDE	0.066 U	0.066	0.34	ug/kg	126		59-141		
p,p-DDT	0.066 U	0.066	0.34	ug/kg	89		54-130		
Delta BHC	0.082 J	0.036	0.17	ug/kg	97		55-144		
Dieldrin	0.066 U	0.066	0.34	ug/kg	97		65-129		
Endosulfan I	0.044 U	0.044	0.17	ug/kg	85		45-123		
Endosulfan II	0.066 U	0.066	0.34	ug/kg	120		63-127		
Endosulfan Sulfate	0.066 U	0.066	0.34	ug/kg	131		72-138		
Endrin	0.066 U	0.066	0.34	ug/kg	97		62-129		
Endrin Aldehyde	0.066 U	0.066	0.34	ug/kg	102		55-132		
Endrin Ketone	0.066 U	0.066	0.34	ug/kg	120		69-139		
Heptachlor	0.060 U	0.060	0.17	ug/kg	91		43-124		
Heptachlor Epoxide	0.034 U	0.034	0.17	ug/kg	133*		65-131		
Methoxychlor	0.34 U	0.34	1.7	ug/kg	102		59-125		
Mirex	0.066 U	0.066	0.34	ug/kg					
Toxaphene	2.2 U	2.2	6.6	ug/kg					

Batch number: 103620004A	Sample number(s): 6173162								
EFH (C12-C14)	0.10 U	0.10	0.60	mg/l	96	88	60-120	9	30
EFH (C15-C20)	0.10 U	0.10	0.60	mg/l	100	91	60-120	10	30
EFH (C21-C30)	0.10 U	0.10	0.60	mg/l	100	92	60-120	8	30
EFH (C30 - C40)	0.10 U	0.10	0.60	mg/l	100	93	60-120	7	30
EFH (C8-C11)	0.10 U	0.10	0.60	mg/l	72	68	60-120	6	30

Batch number: 103620026A	Sample number(s): 6173165-6173166, 6173171, 6173177								
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	86		66-113		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	90		66-113		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	91		66-113		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C30 - C40)	0.40 U	0.40	1.2	mg/kg	88		66-113		
EFH (C8-C11)	0.40 U	0.40	1.2	mg/kg	73		66-113		
Batch number: 103630029A	Sample number(s): 6173162								
Ethanol	200 U	200.	1,000	ug/l	108	100	66-132	8	20
Isopropanol	200 U	200.	1,000	ug/l	96	92	75-125	4	20
Methanol	200 U	200.	1,000	ug/l	108	104	77-137	4	20
Batch number: 103630030A	Sample number(s): 6173165-6173166								
Ethanol	100 U	100.	500	ug/kg	98	100	75-112	3	20
Isopropanol	100 U	100.	500	ug/kg	88	90	75-125	2	20
Methanol	110 J	100.	500	ug/kg	96	98	75-134	3	20
Batch number: 103630032A	Sample number(s): 6173165-6173166, 6173171, 6173177								
Diethylene glycol	5.0 U	5.0	13	mg/kg	101	101	75-125	1	20
Ethylene glycol	5.0 U	5.0	13	mg/kg	84	87	75-125	4	20
Propylene glycol	5.0 U	5.0	13	mg/kg	103	104	75-125	1	20
Batch number: 103640014A	Sample number(s): 6173171, 6173177								
Ethanol	100 U	100.	500	ug/kg	103		75-112		
Isopropanol	100 U	100.	500	ug/kg	94		75-125		
Methanol	100 U	100.	500	ug/kg	97		75-134		
Batch number: 103640032A	Sample number(s): 6173162								
Diethylene glycol	14 U	14.	100	mg/l	95	100	78-126	5	20
Ethylene glycol	10 U	10.	100	mg/l	95	95	80-124	0	20
Propylene glycol	10 U	10.	100	mg/l	90	90	80-120	0	20
Batch number: 103620021A	Sample number(s): 6173162								
m-Terphenyl	0.080 U	0.080	0.25	mg/l	99	99	75-125	0	20
o-Terphenyl	0.080 U	0.080	0.25	mg/l	100	100	75-125	0	20
p-Terphenyl	0.080 U	0.080	0.25	mg/l	96	98	75-125	2	20
Batch number: 103640012A	Sample number(s): 6173165-6173166, 6173171, 6173177								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	107		75-125		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	111		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	105		75-125		
Batch number: 103575713005	Sample number(s): 6173161-6173162								
Mercury	0.000050 U	0.00005	0.00020	mg/l	106	103	80-120	2	20
Batch number: 103641026002A	Sample number(s): 6173160, 6173163-6173177								
Antimony	0.0583 U	0.0583	0.194	mg/kg	65		11-208		
Arsenic	0.0658 J	0.0583	0.388	mg/kg	100		80-120		
Beryllium	0.0155 U	0.0155	0.0971	mg/kg	101		82-118		
Cadmium	0.0350 U	0.0350	0.0971	mg/kg	102		82-118		
Chromium	0.117 U	0.117	0.388	mg/kg	96		80-120		
Cobalt	0.0194 U	0.0194	0.0971	mg/kg	100		82-118		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Lead	0.0128 J	0.0101	0.194	mg/kg	100		80-120		
Nickel	0.146 J	0.0971	0.388	mg/kg	103		80-120		
Silver	0.0117 U	0.0117	0.0971	mg/kg	104		66-134		
Thallium	0.0291 U	0.0291	0.0971	mg/kg	104		81-119		
Zinc	0.544 U	0.544	2.91	mg/kg	100		78-122		
Batch number: 103641026002B									
Selenium	0.0389 J	0.0388	0.388	mg/kg	100		79-122		
Batch number: 103641026002C									
Molybdenum	0.0485 U	0.0485	0.0971	mg/kg	103		78-122		
Batch number: 103641026002D									
Barium	0.105 U	0.105	0.388	mg/kg	106		79-121		
Batch number: 103645708002									
Aluminum	5.76 J	4.88	19.4	mg/kg	99		61-110		
Boron	0.864 U	0.864	4.85	mg/kg	89		78-110		
Calcium	12.6 J	5.95	19.4	mg/kg	96		88-110		
Iron	4.57 U	4.57	19.4	mg/kg	93		61-110		
Lithium	0.21 U	0.21	1.9	mg/kg	99		80-120		
Magnesium	2.47 U	2.47	9.71	mg/kg	95		82-110		
Manganese	0.0757 U	0.0757	0.485	mg/kg	96		81-119		
Phosphorus	1.68 J	0.544	9.71	mg/kg	99		80-120		
Potassium	17.5 U	17.5	48.5	mg/kg	96		78-110		
Sodium	36.2 U	36.2	97.1	mg/kg	91		87-110		
Strontium	0.0650 J	0.0602	0.485	mg/kg	98		79-121		
Tin	0.971 U	0.971	9.71	mg/kg	99		90-114		
Titanium	0.369 U	0.369	0.971	mg/kg	90		80-120		
Zirconium	0.816 U	0.816	4.85	mg/kg	99		80-120		
Batch number: 103645711003									
Mercury	0.0028 U	0.0028	0.0979	mg/kg	100		88-123		
Batch number: 103651848001									
Aluminum	0.0834 U	0.0834	0.200	mg/l	96	95	90-112	1	20
Boron	0.0138 U	0.0138	0.0500	mg/l	96	95	90-110	0	20
Calcium	0.0702 U	0.0702	0.200	mg/l	98	98	90-112	0	20
Iron	0.0522 U	0.0522	0.200	mg/l	99	99	90-112	0	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	102	102	80-120	0	20
Magnesium	0.0172 U	0.0172	0.100	mg/l	97	97	89-110	0	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	99	98	90-110	1	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	100	100	80-120	0	20
Potassium	0.239 U	0.239	0.500	mg/l	97	98	85-115	1	20
Sodium	0.433 U	0.433	1.00	mg/l	99	98	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	102	101	90-110	1	20
Tin	0.0098 U	0.0098	0.0200	mg/l	99	99	90-110	0	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	101	100	90-113	1	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	101	80-120	0	20
Batch number: 103656050001A									
Antimony	0.00030 U	0.00030	0.0010	mg/l	94	102	87-110	8	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	98	102	86-111	4	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	103	103	90-112	1	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	102	106	90-114	4	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	95	97	90-118	2	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	99	101	80-120	2	20
Copper	0.00058 J	0.00038	0.0020	mg/l	100	101	90-113	1	20

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Lead	0.00023 J	0.00005	0.0010	mg/l	100	99	90-115	1	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	105	105	90-113	0	20
Silver	0.000080 U	0.00008	0.00050	mg/l	102	104	90-115	2	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	107	95	89-116	12	20
Vanadium	0.00016 U	0.00016	0.00050	mg/l	94	96	80-120	3	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	101	102	80-120	2	20
Batch number: 103656050001B	Sample number(s): 6173161-6173162								
Selenium	0.00025 U	0.00025	0.0020	mg/l	102	102	85-114	0	20
Batch number: 103656050001C	Sample number(s): 6173161-6173162								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	101	101	80-120	0	20
Batch number: 103656050001D	Sample number(s): 6173161-6173162								
Barium	0.00038 U	0.00038	0.0020	mg/l	103	105	88-113	1	20
Batch number: 110101026002A	Sample number(s): 6173160, 6173163-6173177								
Copper	0.0719 J	0.0660	0.400	mg/kg	98		80-120		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	95		90-110		
Batch number: 10356196903A	Sample number(s): 6173162								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	97	97	90-110	0	20
11b Anions by 300.0 - Nitrate	0.050 U	0.050	0.10	mg/l	97	97	90-110	0	20
Batch number: 10357113001A	Sample number(s): 6173161-6173162								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	98	99	90-110	1	20
Batch number: 10363658701A	Sample number(s): 6173161-6173162								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	93	96	85-115	3	20
Batch number: 10364196902A	Sample number(s): 6173161								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	104	106	90-110	2	20
Batch number: 10365117102A	Sample number(s): 6173162								
21b Cyanide by 9012B	0.0050 U	0.0050	0.010	mg/l	107	100	90-110	6	20
Batch number: 11004102201A	Sample number(s): 6173165-6173166, 6173171, 6173177								
21a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	107		80-120		
Batch number: 11013013201A	Sample number(s): 6173160, 6173163-6173165								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	101		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	101		90-110		
Batch number: 11013013201B	Sample number(s): 6173166-6173168, 6173170-6173177								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	101		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	101		90-110		
Batch number: 11013013203A	Sample number(s): 6173160, 6173163-6173165								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	87		85-115		
Batch number: 11013013203B	Sample number(s): 6173167-6173168, 6173170-6173177								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	87		85-115		
Batch number: 11017017201A	Sample number(s): 6173166								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	93		85-115		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11017243201A 3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	96	100	80-120		
Batch number: 10361039402B 22a pH by 9045C	Sample number(s): 6173160,6173163-6173164				100		95-105		
Batch number: 10361039403A 22a pH by 9045C	Sample number(s): 6173165-6173167,6173170-6173176				101		95-105		
Batch number: 10361039403B 22a pH by 9045C	Sample number(s): 6173177				101		95-105		
Batch number: 10361182102B Oxidation Reduction Potential	Sample number(s): 6173160,6173163-6173164				100		98-102		
Batch number: 10361182103A Oxidation Reduction Potential	Sample number(s): 6173165-6173167,6173170-6173176				100		98-102		
Batch number: 10361182103B Oxidation Reduction Potential	Sample number(s): 6173177				100		98-102		
Batch number: 11007162401B 28a Moisture Content by 160.3	Sample number(s): 6173160,6173163-6173164,6173167-6173170,6173172-6173176				100		80-120		
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		
Batch number: 11014162401A 28a Moisture Content by 160.3	Sample number(s): 6173165-6173166,6173171,6173177				100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: B103621AA	Sample number(s): 6173165-6173166,6173171,6173174-6173175,6173177 UNSPK: 6173165								
Acetone	95		15-210						
Benzene	106		55-143						
Bromobenzene	84		43-139						
Bromochloromethane	104		60-137						
Bromodichloromethane	97		53-136						
Bromoform	85		38-124						
Bromomethane	68		42-168						
2-Butanone	87		37-163						
n-Butylbenzene	83		30-146						
sec-Butylbenzene	87		33-157						
tert-Butylbenzene	85		41-152						
Carbon Tetrachloride	107		45-153						
Chlorobenzene	92		49-135						
Chloroethane	69		39-152						
2-Chloroethyl Vinyl Ether	98		32-139						
Chloroform	105		61-142						
Chloromethane	92		51-163						

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Chlorotoluene	86		42-146						
4-Chlorotoluene	85		39-145						
1,2-Dibromo-3-chloropropane	73		30-139						
Dibromochloromethane	90		51-128						
1,2-Dibromoethane	91		54-129						
Dibromomethane	100		57-130						
1,2-Dichlorobenzene	79		36-133						
1,3-Dichlorobenzene	79		34-134						
1,4-Dichlorobenzene	79		35-136						
Dichlorodifluoromethane	84		26-151						
1,1-Dichloroethane	106		63-142						
1,2-Dichloroethane	102		68-131						
1,1-Dichloroethene	110		61-149						
cis-1,2-Dichloroethene	105		60-136						
trans-1,2-Dichloroethene	108		59-142						
1,2-Dichloropropane	102		62-135						
1,3-Dichloropropane	93		58-129						
2,2-Dichloropropane	101		53-147						
1,1-Dichloropropene	106		54-145						
cis-1,3-Dichloropropene	89		51-131						
trans-1,3-Dichloropropene	83		49-129						
Ethylbenzene	94		44-141						
Freon 113	112		56-156						
Hexachlorobutadiene	68		10-155						
2-Hexanone	60		32-160						
Isopropylbenzene	91		38-144						
p-Isopropyltoluene	85		29-152						
Methyl Tertiary Butyl Ether	93		55-129						
4-Methyl-2-pentanone	70		46-139						
Methylene Chloride	97		61-141						
n-Propylbenzene	91		39-157						
Styrene	89		35-134						
1,1,1,2-Tetrachloroethane	94		52-130						
1,1,2,2-Tetrachloroethane	83		40-152						
Tetrachloroethene	98		42-149						
Toluene	98		50-146						
1,2,3-Trichlorobenzene	59		10-140						
1,2,4-Trichlorobenzene	58		10-136						
1,1,1-Trichloroethane	107		64-142						
1,1,2-Trichloroethane	94		54-139						
Trichloroethene	102		53-144						
Trichlorofluoromethane	92		47-163						
1,2,3-Trichloropropane	84		45-154						
1,2,4-Trimethylbenzene	85		37-149						
1,3,5-Trimethylbenzene	87		38-150						
Vinyl Chloride	93		50-154						
m+p-Xylene	95		44-137						
o-Xylene	89		42-137						

Batch number: E103562AB
1,4-Dioxane

Sample number(s): 6173162,6173178 UNSPK: P171167
109 50-150

Batch number: 10363SLG026

Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172090

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
N-Nitrosodimethylamine	69*	69*	70-130	0	30				
Batch number: 10363SLK026	Sample number(s): 6173160, 6173163-6173169, 6173171-6173177 UNSPK: 6173167								
Acenaphthene	95	97	75-115	2	30				
Acenaphthylene	98	99	49-126	0	30				
Aniline	60	55	14-114	8	30				
Anthracene	100	97	75-115	2	30				
Benzidine	38	49	35-141	24	30				
Benzo(a)anthracene	97	96	65-122	1	30				
Benzo(a)pyrene	86	87	57-126	2	30				
Benzo(b)fluoranthene	87	87	59-125	0	30				
Benzo(g,h,i)perylene	77	81	59-127	4	30				
Benzo(k)fluoranthene	91	89	56-132	2	30				
Benzoic acid	97	101	10-173	4	30				
Benzyl alcohol	91	88	55-123	4	30				
4-Bromophenyl-phenylether	92	91	67-129	1	30				
Butylbenzylphthalate	108	109	73-134	1	30				
Di-n-butylphthalate	97	96	67-123	1	30				
Carbazole	97	96	64-120	1	30				
4-Chloro-3-methylphenol	98	98	53-130	0	30				
4-Chloroaniline	58	55	23-95	4	30				
bis(2-Chloroethoxy)methane	98	94	54-117	4	30				
bis(2-Chloroethyl)ether	85	82	60-116	3	30				
bis(2-Chloroisopropyl)ether	86	82	55-142	5	30				
2-Chloronaphthalene	81	81	50-141	0	30				
2-Chlorophenol	97	91	73-121	6	30				
4-Chlorophenyl-phenylether	97	100	64-119	3	30				
Chrysene	94	93	62-128	1	30				
Dibenz(a,h)anthracene	83	83	65-125	1	30				
Dibenzofuran	97	97	71-112	0	30				
1,2-Dichlorobenzene	85	79	66-108	8	30				
1,3-Dichlorobenzene	78	74	63-109	6	30				
1,4-Dichlorobenzene	80	76	53-113	5	30				
3,3'-Dichlorobenzidine	75	74	25-123	1	30				
2,4-Dichlorophenol	99	98	78-117	1	30				
Diethylphthalate	95	96	66-118	1	30				
2,4-Dimethylphenol	98	98	56-130	1	30				
3,5-Dimethylphenol	104	103	70-130	1	30				
Dimethylphthalate	94	94	64-118	0	30				
4,6-Dinitro-2-methylphenol	77	76	10-148	1	30				
2,4-Dinitrophenol	71	72	20-143	1	30				
2,4-Dinitrotoluene	99	104	57-114	4	30				
2,6-Dinitrotoluene	98	100	69-123	2	30				
1,2-Diphenylhydrazine	106	102	71-129	4	30				
bis(2-Ethylhexyl)phthalate	103	103	63-122	0	30				
Fluoranthene	99	98	59-122	1	30				
Fluorene	96	97	60-125	1	30				
Hexachlorobenzene	98	98	61-111	0	30				
Hexachlorobutadiene	95	94	62-120	1	30				
Hexachlorocyclopentadiene	64	54	10-153	17	30				
Hexachloroethane	82	78	57-109	5	30				
Indeno(1,2,3-cd)pyrene	81	82	61-126	2	30				
Isophorone	94	91	51-118	3	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1-Methylnaphthalene	95	93	73-112	2	30				
2-Methylnaphthalene	90	87	76-114	3	30				
2-Methylphenol	94	91	47-142	3	30				
4-Methylphenol	91	87	55-126	4	30				
Naphthalene	89	86	72-116	4	30				
2-Nitroaniline	105	105	67-125	0	30				
3-Nitroaniline	98	99	59-122	1	30				
4-Nitroaniline	81	84	52-112	4	30				
Nitrobenzene	99	98	51-114	1	30				
2-Nitrophenol	98	97	74-115	1	30				
4-Nitrophenol	108	110	39-133	2	30				
N-Nitroso-di-n-propylamine	90	85	60-116	5	30				
N-Nitrosodimethylamine	78	73	47-116	6	30				
N-Nitrosodiphenylamine	96	96	86-145	1	30				
Di-n-octylphthalate	100	98	56-126	2	30				
Pentachlorophenol	84	76	17-149	10	30				
Phenanthrene	96	95	65-125	1	30				
Phenol	95	91	58-126	5	30				
Pyrene	104	108	51-151	4	30				
1,2,4-Trichlorobenzene	93	91	72-115	3	30				
2,4,5-Trichlorophenol	100	103	34-139	3	30				
2,4,6-Trichlorophenol	106	105	49-140	1	30				

Batch number: 10365SLA026 Sample number(s): 6173160, 6173163-6173169, 6173171-6173177 UNSPK: 6173167

Acenaphthene	92	91	63-105	0	30
Acenaphthylene	94	103	55-126	8	30
Anthracene	89	88	46-136	1	30
Benzo(a)anthracene	80	87	39-144	7	30
Benzo(a)pyrene	77	87	34-156	10	30
Benzo(b)fluoranthene	78	86	43-155	7	30
Benzo(g,h,i)perylene	56	56	33-141	0	30
Benzo(k)fluoranthene	86	100	42-144	14	30
Butylbenzylphthalate	109	108	73-140	0	30
Di-n-butylphthalate	100	108	78-160	6	30
Chrysene	72	81	29-156	10	30
Dibenz(a,h)anthracene	76	77	41-130	1	30
Diethylphthalate	115	108	87-131	7	30
Dimethylphthalate	106	111	74-118	5	30
Bis(2-Ethylhexyl)phthalate	84	99	39-167	13	30
Fluoranthene	63	76	26-166	13	30
Fluorene	94	94	45-121	0	30
Indeno(1,2,3-cd)pyrene	70	71	21-143	1	30
1-Methylnaphthalene	92	89	72-123	3	30
2-Methylnaphthalene	85	81	28-121	5	30
Naphthalene	90	87	61-102	3	30
N-Nitrosodimethylamine	103	103	48-113	0	30
Di-n-octylphthalate	104	116	40-192	11	30
Phenanthrene	82	83	12-165	1	30
Pyrene	54	65	15-153	12	30

Batch number: 10357A34B Sample number(s): 6173165-6173166, 6173171, 6173177 UNSPK: P172090

9a TPH by EPA 8015B Gas C5-C12 73 74 39-118 15 30

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103650008A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172105								
4-Amino-2,6-Dinitrotoluene	99	95	80-127	4	50				
2-Amino-4,6-Dinitrotoluene	100	96	80-137	4	50				
1,3-Dinitrobenzene	103	98	38-166	5	50				
2,4-Dinitrotoluene	100	95	80-131	5	50				
2,6-Dinitrotoluene	105	100	80-127	5	50				
HMX	85	82	63-128	4	50				
Nitrobenzene	107	100	80-125	7	50				
Nitroglycerin	88	86	80-120	3	50				
2-Nitrotoluene	108	102	80-122	5	50				
3-Nitrotoluene	108	103	72-119	5	50				
4-Nitrotoluene	107	103	80-125	4	50				
PETN	97	93	80-121	5	50				
RDX	91	89	75-129	2	50				
Tetryl	105	101	55-174	4	50				
1,3,5-Trinitrobenzene	112	107	82-126	5	50				
2,4,6-Trinitrotoluene	102	98	82-130	4	50				
Batch number: 103610005A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172090								
17a Formaldehyde by 8315A	62*	70*	80-120	3	50				
Batch number: 110040014A	Sample number(s): 6173160,6173163-6173169,6173171-6173173 UNSPK: 6173167								
2,4-D	125	117	28-161	6	35				
Dalapon	67	59	12-86	13	50				
2,4-DB	95	82	20-170	14	50				
Dicamba	105	102	33-120	2	50				
Dinoseb	12	6	1-44	69*	35				
2,4-DP (Dichlorprop)	101	98	55-141	3	50				
MCPA	103	83	31-184	22	50				
MCPP (Mecoprop)	99	80	16-174	22	50				
2,4,5-T	83	75	25-132	9	35				
2,4,5-TP	86	83	10-183	3	35				
Batch number: 110040016A	Sample number(s): 6173164,6173175 UNSPK: P167468								
6a Perchlorate EPA 6850	110	110	80-120	0	20				
Batch number: 103640029A	Sample number(s): 6173160,6173163-6173169,6173171-6173177 UNSPK: 6173167								
PCB-1016	131	167*	29-146	24	50				
PCB-1260	136	149	39-149	9	50				
Batch number: 103650029A	Sample number(s): 6173160,6173163-6173169,6173171-6173173 UNSPK: 6173167								
Aldrin	103	94	16-126	9	50				
Alpha BHC	67	61	10-129	10	50				
Beta BHC	72	66	14-147	9	50				
Gamma BHC - Lindane	76	61	10-140	22	50				
p,p-DDD	66	72	16-163	9	50				
p,p-DDE	102	102	18-161	0	50				
p,p-DDT	77	65	10-176	17	50				
Delta BHC	69	75	23-140	9	50				
Dieldrin	68	71	19-154	4	50				
Endosulfan I	55	55	16-137	0	50				
Endosulfan II	82	85	28-154	4	50				
Endosulfan Sulfate	92	108	21-160	15	50				

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Endrin	70	67	11-149	4	50				
Endrin Aldehyde	61	67	10-148	10	35				
Endrin Ketone	91	89	22-165	2	50				
Heptachlor	85	70	13-126	20	50				
Heptachlor Epoxide	94	88	13-157	7	50				
Methoxychlor	73	72	32-147	1	50				
Batch number: 103620026A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172090								
EFH (C12-C14)	74	69	49-123	7	20				
EFH (C15-C20)	97	90	49-123	8	20				
EFH (C21-C30)	55	41*	49-123	11	20				
EFH (C30 - C40)	17*	-23*	49-123	29*	20				
EFH (C8-C11)	54	56	49-123	4	20				
Batch number: 103630030A	Sample number(s): 6173165-6173166 UNSPK: P173171								
Ethanol	77	72	24-143	6	20				
Isopropanol	68*	66*	75-125	3	20				
Methanol	76	74	45-136	3	20				
Batch number: 103630032A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: 6173171								
Diethylene glycol	68	77	59-109	11	20				
Ethylene glycol	63	68	63-107	8	20				
Propylene glycol	73	80	63-107	10	20				
Batch number: 103640014A	Sample number(s): 6173171,6173177 UNSPK: P172090								
Ethanol	88	88	24-143	1	20				
Isopropanol	80	80	75-125	0	20				
Methanol	77	81	45-136	5	20				
Batch number: 103640012A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172090								
m-Terphenyl	105	104	75-125	1	20				
o-Terphenyl	110	108	75-125	1	20				
p-Terphenyl	104	103	75-125	1	20				
Batch number: 103641026002A	Sample number(s): 6173160,6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Antimony	32*	35*	75-125	7	20	0.104 J	0.0600 U	200* (1)	20
Arsenic	174*	113	75-125	23*	20	2.77	3.75	30*	20
Beryllium	110	97	75-125	10	20	0.347	0.417	18 (1)	20
Cadmium	109	109	75-125	2	20	0.104	0.113	8 (1)	20
Chromium	112	110	75-125	2	20	12.9	14.4	11	20
Cobalt	94	95	75-125	1	20	4.55	4.81	6	20
Lead	120	112	75-125	4	20	4.31	4.54	5	20
Nickel	118	107	75-125	7	20	8.93	10.1	12	20
Silver	108	110	75-125	0	20	0.0262 J	0.0284 J	8 (1)	20
Thallium	106	113	75-125	3	20	0.210	0.217	3 (1)	20
Zinc	115 (2)	153 (2)	75-125	6	20	49.2	50.2	2	20
Batch number: 103641026002B	Sample number(s): 6173160,6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Selenium	89	89	75-125	2	20	0.109 J	0.0972 J	12 (1)	20
Batch number: 103641026002C	Sample number(s): 6173160,6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Molybdenum	105	107	75-125	0	20	0.385	0.450	16 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103641026002D	Sample number(s): 6173160, 6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Barium	148 (2)	277 (2)	75-125	11	20	87.6	86.5	1	20
Batch number: 103645708002	Sample number(s): 6173160, 6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Aluminum	1246 (2)	-101 (2)	75-125	18	20	13,300	12,500	6	20
Boron	88	89	84-115	6	20	4.41 J	3.66 J	19 (1)	20
Calcium	-91 (2)	-256 (2)	75-125	18	20	4,470	2,710	49*	20
Iron	7037 (2)	90 (2)	75-125	31*	20	18,100	16,000	12	20
Lithium	104	95	82-114	3	20	19.8	18.2	9	20
Magnesium	856 (2)	153 (2)	75-125	25*	20	4,260	3,750	13	20
Manganese	207 (2)	109 (2)	75-125	14	20	243	240	1	20
Phosphorus	144*	142*	75-125	1	20	364	314	15	20
Potassium	165*	170*	75-125	3	20	2,620	2,450	7	20
Sodium	94	98	75-125	9	20	82.2 J	82.5 J	0 (1)	20
Strontium	91	87	75-115	1	20	22.0	16.6	28*	20
Tin	89	90	80-110	6	20	1.95 J	1.94 J	0 (1)	20
Titanium	393 (2)	358 (2)	75-125	1	20	973	979	1	20
Zirconium	95	96	75-125	5	20	2.59 J	2.01 J	25* (1)	20
Batch number: 103645711003	Sample number(s): 6173160, 6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Mercury	95	99	65-135	4	20	0.0139 J	0.0120 J	14 (1)	20
Batch number: 110101026002A	Sample number(s): 6173160, 6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Copper	103	102	75-125	1	20	11.6	8.43	32*	20
Vanadium	72 (2)	78 (2)	75-125	1	20	41.7	30.1	32*	20
Batch number: 11004102201A	Sample number(s): 6173165-6173166, 6173171, 6173177 UNSPK: 6173165 BKG: 6173165								
21a Cyanide by 9012B	110		75-125			0.18 U	0.17 U	0 (1)	20
Batch number: 11013013201A	Sample number(s): 6173160, 6173163-6173165 UNSPK: P172316 BKG: P172316								
11a Anions by 300.0 - Fluoride	81		80-120			0.89 J	0.81 J	10 (1)	20
11a Anions by 300.0 - Nitrate	94		80-120			5.2	4.5	15 (1)	20
Batch number: 11013013201B	Sample number(s): 6173166-6173168, 6173170-6173177 UNSPK: 6173167 BKG: 6173167								
11a Anions by 300.0 - Fluoride	79*		80-120			1.3	1.7	32* (1)	20
11a Anions by 300.0 - Nitrate	100		80-120			0.80 U	0.81 J	200* (1)	20
Batch number: 11013013203A	Sample number(s): 6173160, 6173163-6173165 UNSPK: P172316 BKG: P172316								
7a Perchlorate EPA 314.0	84		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11013013203B	Sample number(s): 6173167-6173168, 6173170-6173177 UNSPK: 6173167 BKG: 6173167								
7a Perchlorate EPA 314.0	87		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11017017201A	Sample number(s): 6173166 UNSPK: 6173166 BKG: 6173166								
7a Perchlorate EPA 314.0	95		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11017243201A	Sample number(s): 6173160, 6173163-6173168, 6173170-6173177 UNSPK: 6173167 BKG: 6173167								
3a Cr VI by EPA 7199	99		75-125			0.26 J	0.39 J	42* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10361039402B 22a pH by 9045C	Sample number(s): 6173160, 6173163-6173164 BKG: P172316 6.51 6.46 1 1								
Batch number: 10361039403A 22a pH by 9045C	Sample number(s): 6173165-6173167, 6173170-6173176 BKG: 6173167 7.70 7.76 1 1								
Batch number: 10361039403B 22a pH by 9045C	Sample number(s): 6173177 BKG: 6173177 5.91 5.89 0 1								
Batch number: 10361182102B Oxidation Reduction Potential	Sample number(s): 6173160, 6173163-6173164 BKG: P172316 536 541 1 6								
Batch number: 10361182103A Oxidation Reduction Potential	Sample number(s): 6173165-6173167, 6173170-6173176 BKG: 6173167 459 457 0 6								
Batch number: 10361182103B Oxidation Reduction Potential	Sample number(s): 6173177 BKG: 6173177 618 619 0 6								
Batch number: 11007162401B 28a Moisture Content by 160.3 28a Moisture Content by 160.3 28a Moisture Content by 160.3	Sample number(s): 6173160, 6173163-6173164, 6173167-6173170, 6173172-6173176 BKG: 6173167 13.9 12.7 8 20 13.9 12.7 8 20 13.9 12.7 8 20								
Batch number: 11014162401A 28a Moisture Content by 160.3	Sample number(s): 6173165-6173166, 6173171, 6173177 BKG: P182836 12.3 13.1 6 20								

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B
Batch number: B103621AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6173165	104	100	98	89
6173166	106	103	97	86
6173171	106	102	95	91
6173174	107	104	94	92
6173175	106	104	97	88
6173177	109	110	95	93
Blank	105	103	95	92
LCS	101	102	98	101
LCSD	100	102	99	100
MS	101	104	98	101
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Surrogate Quality Control

Batch number: E103562AB
Toluene-d8

6173162	102
6173178	102
Blank	101
LCS	100
LCSD	101
MS	101

Limits: 80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM
Batch number: E103631AA
Toluene-d8

6173165	99
6173166	98
6173171	98
6173174	99
6173175	99
6173177	99
Blank	99
LCS	98
LCSD	98

Limits: 70-130

Analysis Name: 1b Volatile Organics EPA8260
Batch number: Y103631AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6173162	98	98	99	96
6173178	98	101	99	97
Blank	98	100	100	97
LCS	99	98	101	100
LCSD	99	99	101	100

Limits: 86-118 80-120 88-110 86-115

Analysis Name: 19b NDMA by 1625C
Batch number: 10362WAA026
N-Nitrosodimethylamine-d6

6173162	148
Blank	101
LCS	97
LCSD	102

Limits: 50-150

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 10362WAC026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6173161	120	79	86

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Surrogate Quality Control

6173162	87	78	87
Blank	90	85	93
LCS	93	84	88
LCSD	87	80	88

Limits:	40-130	45-130	45-135

Analysis Name: 5b Semivolatiles by EPA 8270C

Batch number: 10362WAE026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6173161	57	40	96	84	87	86
6173162	50	34	98	83	87	90
Blank	49	36	96	83	85	83
LCS	64	48	98	92	93	87
LCSD	61	47	102	93	94	86

Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 19a NDMA by 1625C

Batch number: 10363SLG026

N-Nitrosodimethylamine-d6

6173165	733*
6173166	515*
6173171	592*
6173177	596*
Blank	104
LCS	110
MS	152*
MSD	151*

Limits:	50-150

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 10363SLK026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6173160	92	90	113	85	91	93
6173163	95	93	114	87	92	106
6173164	87	85	106	82	89	94
6173165	87	87	109	84	91	86
6173166	88	85	103	79	86	87
6173167	95	93	112	84	94	97
6173168	92	91	113	91	90	93
6173169	88	86	114	89	91	97
6173171	91	89	106	82	88	91
6173172	82	80	103	78	86	89
6173173	86	87	99	80	92	88
6173174	87	88	101	84	94	90
6173175	85	85	97	81	91	82
6173176	88	88	102	81	93	84
6173177	87	87	100	80	96	85
Blank	90	92	102	84	92	87
LCS	94	94	116	88	92	86
MS	92	91	113	91	90	93

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Surrogate Quality Control

MSD	88	86	114	89	91	97
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10365SLA026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6173160	92	84	90
6173163	93	84	80
6173164	89	83	82
6173165	91	86	83
6173166	90	85	80
6173167	90	85	80
6173168	97	90	75
6173169	96	96	79
6173171	94	86	88
6173172	88	87	86
6173173	97	89	85
6173174	90	83	89
6173175	90	94	83
6173176	88	78	78
6173177	98	97	75
Blank	80	81	83
LCS	96	89	89
MS	97	90	75
MSD	96	96	79
Limits:	40-130	45-130	45-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 10357A34B
Trifluorotoluene-F

6173165	82
6173166	86
6173171	103
6173177	87
Blank	96
LCS	91
LCSD	96
MS	84
MSD	85
Limits:	61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 10363B20A
Trifluorotoluene-F

6173162	82
6173178	84
Blank	83
LCS	106
LCSD	107
Limits:	63-135

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Surrogate Quality Control

Analysis Name: 17b Formaldehyde by 8315A
Batch number: 103560024A
Butyraldehyde

6173162	117
Blank	92
LCS	97
LCSD	102

Limits: 45-145

Analysis Name: 12b Pesticides by 8081A
Batch number: 103570023A
Tetrachloro-m-xylene Decachlorobiphenyl

6173161	133	127
6173162	137	135
Blank	102	107
LCS	105	115
LCSD	105	115

Limits: 52-141 40-144

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 103570024A
Tetrachloro-m-xylene Decachlorobiphenyl

6173161	127	137*
6173162	122	126*
Blank	109	107
LCS	107	104
LCSD	109	114

Limits: 30-150 45-120

Analysis Name: 17a Formaldehyde by 8315A
Batch number: 103610005A
Butyraldehyde

6173165	106
6173166	112
6173171	106
6173177	95
Blank	92
LCS	97
MS	102
MSD	102

Limits: 64-126

Analysis Name: 20b Energetics by 8330A
Batch number: 103610006A
2-Nitro-m-xylene

6173162	85
Blank	85

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Surrogate Quality Control

LCS 97
LCSD 90

Limits: 50-134

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 103620008A
2,4-Dichlorophenylacetic
acid

6173161 97
6173162 133
Blank 108
LCS 124
LCSD 114

Limits: 35-144

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103640029A
Tetrachloro-m-xylene Decachlorobiphenyl

6173160	146*	124*
6173163	114	119
6173164	105	109
6173165	88	104
6173166	110	104
6173167	95	99
6173168	94	95
6173169	103	103
6173171	102	88
6173172	103	105
6173173	90	106
6173174	82	90
6173175	115	123*
6173176	131	129*
6173177	124	113
Blank	103	111
LCS	103	108
LCSD	130	137*
MS	94	95
MSD	103	103

Limits: 53-139 45-120

Analysis Name: 20a Energetics by 8330A
Batch number: 103650008A
2-Nitro-m-xylene

6173165 117
6173166 122
6173171 113
6173177 118
Blank 123
LCS 120
LCSD 115
MS 121

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Surrogate Quality Control

MSD 116

Limits: 80-146

Analysis Name: 12a Pesticides by 8081A

Batch number: 103650029A

Tetrachloro-m-xylene Decachlorobiphenyl

6173160	75	115
6173163	71	83
6173164	40*	67
6173165	78	78
6173166	73	86
6173167	56	49
6173168	73	78
6173169	56	74
6173171	73	128*
6173172	76	57
6173173	71	95
Blank	81	116
LCS	79	116
MS	73	78
MSD	56	74

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 110040014A

2,4-Dichlorophenylacetic
acid

6173160	112
6173163	116
6173164	85
6173165	101
6173166	137
6173167	112
6173168	105
6173169	89
6173171	87
6173172	88
6173173	90
Blank	107
LCS	67
MS	105
MSD	89

Limits: 36-156

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel

Batch number: 103620004A

Chlorobenzene Orthoterphenyl

6173162	83	85
Blank	61	76
LCS	84	94
LCSD	79	87

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Surrogate Quality Control

Limits: 28-152 52-131

Analysis Name: 26b Terphenyls by 8015B
Batch number: 103620021A
n-Triacontane-d62

6173162	99
Blank	94
LCS	90
LCSD	91

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 103620026A
Chlorobenzene Orthoterphenyl

6173165	60	73
6173166	69	80
6173171	60	79
6173177	52	67
Blank	75	85
LCS	79	88
MS	76	84
MSD	75	84

Limits: 37-125 47-145

Analysis Name: 25b Alcohols by 8015B
Batch number: 103630029A
Acetone

6173162	129
Blank	124
LCS	125
LCSD	119

Limits: 54-147

Analysis Name: 25a Alcohols by 8015B
Batch number: 103630030A
Acetone

6173165	84
6173166	87
Blank	98
LCS	96
LCSD	99
MS	86
MSD	86

Limits: 42-138

Analysis Name: 27a Glycols by 8015B
Batch number: 103630032A
Tetramethylene glycol

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 10:05 AM

Group Number: 1226926

Surrogate Quality Control

6173165	83
6173166	86
6173171	76
6173177	85
Blank	102
LCS	107
LCSD	105
MS	76
MSD	82

Limits: 50-119

Analysis Name: 26a Terphenyls by 8015B
Batch number: 103640012A
n-Triacontane-d62

6173165	95
6173166	121
6173171	91
6173177	106
Blank	103
LCS	102
MS	99
MSD	98

Limits: 50-150

Analysis Name: 25a Alcohols by 8015B
Batch number: 103640014A
Acetone

6173171	73
6173177	86
Blank	99
LCS	95
MS	85
MSD	85

Limits: 42-138

Analysis Name: 27b Glycols by 8015B
Batch number: 103640032A
Tetramethylene glycol

6173162	90
Blank	97
LCS	122
LCSD	111

Limits: 10-164

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1226926 6173160-78

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						Other Instructions and Notes																										
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP																																
Samplers: (Signature) <i>Theresa...</i>																																
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8160B	1,4-Dioxane EPA 8260/14	SVOCs EPA 8270C & PAHs 8270 SM	TPH-SIG EPA 8015B	**TPH-EPA EPA 8015B Mod.	**Metals EPA 6010/6020B/7471A	**Hex Chrome EPA 7199	**Fluoride EPA 300.0	**PCBs EPA 8081	**Dioxin/Furan EPA 1631B	**Perchlorate EPA 14.0	Perchlorate Confirmation by EPA 6850	**Pesticides EPA 8081A (surface soil only)	**Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8154	**o-NDA EPA 1631C	**Enthalpic EPA 839A	**Quinide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B				
DUP10-SASB-QC-122210	12.22.10	0905	soil	none	1 x 16 oz. jar & 1 1/2" sleeve		X				X	X	X	X	X	X		X	X												SURFACE DUP	
EB08-SASB-122210	12.22.10	1145	water	none	6-1 liter ambers			X							X	X		X	X												surface tool rinseate	
EB08-SASB-122210	12.22.10	1145	water	none	1-500 ml poly						X	X			X	X															surface tool rinseate	
EB08-SASB-122210	12.22.10	1145	water	HNO3	1-500 ml poly						X																				surface tool rinseate	
FB06-SASB-122210	12.22.10	1330	water	HCl	6-40 mL VOA vials	X	X																									
FB06-SASB-122210	12.22.10	1330	water	none	6-1 liter ambers			X							X	X		X	X												surface tool rinseate	
FB06-SASB-122210	12.22.10	1330	water	none	1-500 ml poly							X	X		X	X															surface tool rinseate	
FB06-SASB-122210	12.22.10	1330	water	HNO3	1-500 ml poly						X																				surface tool rinseate	
FB06-SASB-122210	12.22.10	1330	water	HCl	5-40 mL VOA vials				X																					X	surface tool rinseate	
FB06-SASB-122210	12.22.10	1330	water	none	4-40 mL VOA vials														X										X		surface tool rinseate	
FB06-SASB-122210	12.22.10	1330	water	none	4-1L ambers					X												X	X			X					surface tool rinseate	
FB06-SASB-122210	12.22.10	1330	water	none	1-250 mL glass bottle															X											surface tool rinseate	
FB06-SASB-122210	12.22.10	1330	water	NaOH	1-500 mL poly																			X							surface tool rinseate	
SEO-010-SIV-SS-0.0-0.5	12.22.10	1010	soil	none	1 x 16 oz. jar & 1 1/2" sleeve		X				X	X	X	X	X	X		X	X													
SL-101-SASB-SS-0.0-0.5	12.22.10	0900	soil	none	1 x 16 oz. jar & 1 1/2" sleeve		X				X	X	X	X	X	X		X	X													
SL-117-SASB-SS-0.0-0.5	12.22.10	0925	soil	none	1 x 16 oz. jar & 1 1/2" sleeve		X				X	X	X	X	X	X		X	X													
SL-117-SASB-SS-0.0-0.5	12.22.10	0925	soil	none	1 x 16 oz. jar					X										X	X	X	X	X	X	X	X	X	X	X		
SL-117-SASB-SS-0.0-0.5	12.22.10	0925	soil	none	5 Encore Samplers	X	X		X																							
SL-118-SASB-SS-0.0-0.5	12.22.10	0910	soil	none	1 x 16 oz. jar & 1 1/2" sleeve		X				X	X	X	X	X	X		X	X													
SL-118-SASB-SS-0.0-0.5	12.22.10	0910	soil	none	1 x 16 oz. jar					X										X	X	X	X	X	X	X	X	X	X	X		
SL-118-SASB-SS-0.0-0.5	12.22.10	0910	soil	none	5 Encore Samplers	X	X		X																							
SL-100-SASB-SS-0.0-0.5MS	12.22.10	0902	soil	none	2 16 oz. jars & 2 6" sleeves		X				X	X	X	X	X	X		X	X													surface MS/MSD
SL-114-SASB-SS-0.0-0.5	12.22.10	0922	soil	none	1 x 16 oz. jar & 1 1/2" sleeve		X				X	X	X	X	X	X		X	X													
SL-114-SASB-SS-0.0-0.5	12.22.10	0922	soil	none	1 x 16 oz. jar						X									X	X	X	X	X	X	X	X	X	X	X		
SL-114-SASB-SS-0.0-0.5	12.22.10	0922	soil	none	5 Encore Samplers	X	X		X																							
SL-102-SASB-SS-0.0-0.5	12.22.10	0936	soil	none	1 x 16 oz. jar & 1 1/2" sleeve		X				X	X	X	X	X	X		X	X													
SL-024-SASB-SS-0.0-0.5	12.22.10	1001	soil	none	1 x 16 oz. jar & 1 1/2" sleeve		X				X	X	X	X	X	X		X	X													
SL-157-SASB-SB-4.0-5.0	12.22.10	1048	soil	none	2 16 oz jars		X				X	X	X	X	X	X																
SL-157-SASB-SB-4.5	12.22.10	1045	soil	none	4 Encore Samplers	X	X																									
SL-158-SASB-SB-4.0-5.0	12.22.10	1209	soil	none	2 16 oz jars		X				X	X	X	X	X	X		X	X													
SL-158-SASB-SB-4.5	12.22.10	1201	soil	none	4 Encore Samplers	X	X																									
SL-158-SASB-SB-9.0-10.0	12.22.10	1052	soil	none	2 16 oz jars		X				X	X	X	X	X	X																
SL-145-SASB-SB-4.0-5.0	12.22.10	1454	soil	none	4 16 oz jars		X				X	X	X	X	X	X		X	X													
SL-145-SASB-SB-4.5	12.22.10	1450	soil	none	5 Encore Samplers	X	X		X																							
TB-122210	12.22.10	1300	water	HCl	4-40 mL clear VOA vials	X	X		X																							trip blank
Collection by: (Signature) <i>[Signature]</i> Date/Time: 12.22.10 1630						Received by Laboratory by: (Signature) <i>[Signature]</i> Date/Time: 12/23/10 1120						Laboratory: Lancaster Laboratories, Inc.																				
Field ID: (Signature) <i>[Signature]</i> Date/Time: 12.22.10 1630						Tracking Numbers: 8695 1431 7947, 8695 1431 7958, 8695 1431 9880, 8695 1431 9891, 8695 1432 3563						No. of coolers = 5																				

SL-158-SASB-SB-9.0-10.0 was changed to SL-157-SASB-SB-9.0-10.0, the collection date in the field blank ID was updated to 122210, and the collection time for SL-117-SASB-SS-0.0-0.5 (encores) was updated to 9:25 per PB on 12/23/10.

NLM 12/28/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 10, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/23/2010

Group Number: 1226931

SDG: DX034

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample DescriptionDUP10-SA5B-QC-122210 Soil
EB08-SA5B-122210 Water
FB06-SA5B-122210 Water
SED-010-SIV-SD-0.0-0.5 Sediment
SL-101-SA5B-SS-0.0-0.5 Soil
SL-117-SA5B-SS-0.0-0.5 Soil
SL-118-SA5B-SS-0.0-0.5 Soil
SL-100-SA5B-SS-0.0-0.5 Soil
SL-100-SA5B-SS-0.0-0.5MS Soil
SL-100-SA5B-SS-0.0-0.5MSD Soil
SL-114-SA5B-SS-0.0-0.5 Soil
SL-102-SA5B-SS-0.0-0.5 Soil
SL-024-SA5B-SS-0.0-0.5 Soil
SL-157-SA5B-SB-4.0-5.0 Soil
SL-158-SA5B-SB-4.0-5.0 Soil
SL-157-SA5B-SB-9.0-10.0 Soil
SL-145-SA5B-SB-4.0-5.0 SoilLancaster Labs (LLI) #6173197
6173198
6173199
6173200
6173201
6173202
6173203
6173204
6173205
6173206
6173207
6173208
6173209
6173210
6173211
6173212
6173213

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO CDM Federal Services Program

Attn: Todd Burgess

1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173197
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DDP10 SDG#: DX034-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	13.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173197
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DDP10 SDG#: DX034-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0317 JQ	0.0284	1.16	1
11031	12378-PeCDD	40321-76-4	0.284 JQ	0.0622	5.79	1
11031	123478-HxCDD	39227-28-6	0.660 JB	0.0756	5.79	1
11031	123678-HxCDD	57653-85-7	2.62 J	0.0762	5.79	1
11031	123789-HxCDD	19408-74-3	1.12 J	0.0761	5.79	1
11031	1234678-HpCDD	35822-46-9	69.0 B	0.110	5.79	1
11031	OCDD	3268-87-9	666 B	0.0924	11.6	1
11031	2378-TCDF	51207-31-9	0.0492 U	0.0492	1.16	1
11031	12378-PeCDF	57117-41-6	0.214 JBQ	0.0151	5.79	1
11031	23478-PeCDF	57117-31-4	0.184 JB	0.0181	5.79	1
11031	123478-HxCDF	70648-26-9	0.456 JB	0.0524	5.79	1
11031	123678-HxCDF	57117-44-9	0.328 JBQ	0.0348	5.79	1
11031	123789-HxCDF	72918-21-9	0.211 JBQ	0.0429	5.79	1
11031	234678-HxCDF	60851-34-5	0.501 JB	0.0359	5.79	1
11031	1234678-HpCDF	67562-39-4	5.71 JB	0.0402	5.79	1
11031	1234789-HpCDF	55673-89-7	0.693 JB	0.0497	5.79	1
11031	OCDF	39001-02-0	19.0 B	0.0444	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	105	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	94	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration



Analysis Report

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Page 3 of 4

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173197
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DDP10 SDG#: DX034-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 4 of 4

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173197
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DDP10 SDG#: DX034-01FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 06:13	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173198
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DEB08 SDG#: DX034-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.134 JBQ	0.0904	2.13	1
10915	12378-PeCDD	40321-76-4	0.132 U	0.132	10.7	1
10915	123478-HxCDD	39227-28-6	0.104 U	0.104	10.7	1
10915	123678-HxCDD	57653-85-7	0.110 U	0.110	10.7	1
10915	123789-HxCDD	19408-74-3	0.108 U	0.108	10.7	1
10915	1234678-HpCDD	35822-46-9	0.915 JB	0.158	10.7	1
10915	OCDD	3268-87-9	2.88 JBQ	0.291	21.3	1
10915	2378-TCDF	51207-31-9	0.122 JBQ	0.0724	2.13	1
10915	12378-PeCDF	57117-41-6	0.167 JBQ	0.0534	10.7	1
10915	23478-PeCDF	57117-31-4	0.512 JBQ	0.0479	10.7	1
10915	123478-HxCDF	70648-26-9	0.253 JBQ	0.0735	10.7	1
10915	123678-HxCDF	57117-44-9	0.201 JBQ	0.0711	10.7	1
10915	123789-HxCDF	72918-21-9	0.0884 U	0.0884	10.7	1
10915	234678-HxCDF	60851-34-5	0.242 JBQ	0.0701	10.7	1
10915	1234678-HpCDF	67562-39-4	0.921 JB	0.0946	10.7	1
10915	1234789-HpCDF	55673-89-7	0.383 JB	0.139	10.7	1
10915	OCDF	39001-02-0	0.642 JBQ	0.257	21.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	59	25 - 181
13C12-123478-HxCDD	58	32 - 141
13C12-123678-HxCDD	57	28 - 130
13C12-123789-HxCDD	57	28 - 130
13C12-1234678-HpCDD	48	23 - 140
13C12-OCDD	35	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	58	26 - 123
13C12-234678-HxCDF	58	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	50	28 - 143
13C12-1234789-HpCDF	42	26 - 138
13C12-OCDF	28	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173198
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DEB08 SDG#: DX034-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018001	01/20/2011 23:57	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	2	11018001	01/18/2011 05:45	Ginelle L Haines	1

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173199
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DFB06 SDG#: DX034-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.0883 U	0.0883	2.01	1
10915	12378-PeCDD	40321-76-4	0.172 JBQ	0.117	10.0	1
10915	123478-HxCDD	39227-28-6	0.0868 U	0.0868	10.0	1
10915	123678-HxCDD	57653-85-7	0.0899 U	0.0899	10.0	1
10915	123789-HxCDD	19408-74-3	0.114 JB	0.0880	10.0	1
10915	1234678-HpCDD	35822-46-9	0.685 JB	0.134	10.0	1
10915	OCDD	3268-87-9	1.83 JBQ	0.331	20.1	1
10915	2378-TCDF	51207-31-9	0.0588 U	0.0588	2.01	1
10915	12378-PeCDF	57117-41-6	0.0462 JBQ	0.0461	10.0	1
10915	23478-PeCDF	57117-31-4	0.407 JBQ	0.0439	10.0	1
10915	123478-HxCDF	70648-26-9	0.212 JBQ	0.0549	10.0	1
10915	123678-HxCDF	57117-44-9	0.115 JBQ	0.0514	10.0	1
10915	123789-HxCDF	72918-21-9	0.190 JBQ	0.0622	10.0	1
10915	234678-HxCDF	60851-34-5	0.213 JBQ	0.0527	10.0	1
10915	1234678-HpCDF	67562-39-4	0.778 JB	0.0623	10.0	1
10915	1234789-HpCDF	55673-89-7	0.127 JBQ	0.0833	10.0	1
10915	OCDF	39001-02-0	0.765 JBQ	0.198	20.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	59	23 - 140
13C12-OCDD	44	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	61	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	37	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173199
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DFB06 SDG#: DX034-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018001	01/21/2011 00:54	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	2	11018001	01/18/2011 05:45	Ginelle L Haines	1



Analysis Report

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Page 1 of 4

Sample Description: SED-010-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173200
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DSD10 SDG#: DX034-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	18.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-010-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173200
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DSD10 SDG#: DX034-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0453 J	0.0269	1.22	1
11031	12378-PeCDD	40321-76-4	0.220 JQ	0.0364	6.11	1
11031	123478-HxCDD	39227-28-6	0.127 JBQ	0.0512	6.11	1
11031	123678-HxCDD	57653-85-7	0.467 J	0.0525	6.11	1
11031	123789-HxCDD	19408-74-3	0.368 J	0.0502	6.11	1
11031	1234678-HpCDD	35822-46-9	7.16 B	0.0579	6.11	1
11031	OCDD	3268-87-9	58.4 B	0.0484	12.2	1
11031	2378-TCDF	51207-31-9	0.0486 U	0.0486	1.22	1
11031	12378-PeCDF	57117-41-6	0.169 JBQ	0.0155	6.11	1
11031	23478-PeCDF	57117-31-4	0.397 JB	0.0197	6.11	1
11031	123478-HxCDF	70648-26-9	0.287 JBQ	0.0288	6.11	1
11031	123678-HxCDF	57117-44-9	0.179 JBQ	0.0228	6.11	1
11031	123789-HxCDF	72918-21-9	0.0739 JBQ	0.0254	6.11	1
11031	234678-HxCDF	60851-34-5	0.220 JB	0.0237	6.11	1
11031	1234678-HpCDF	67562-39-4	1.09 JB	0.0226	6.11	1
11031	1234789-HpCDF	55673-89-7	0.0939 JBQ	0.0291	6.11	1
11031	OCDF	39001-02-0	2.13 JB	0.0333	12.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	96	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-010-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173200
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DSD10 SDG#: DX034-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-010-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173200
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DSD10 SDG#: DX034-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 07:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173201
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL101 SDG#: DX034-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	15.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173201
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL101 SDG#: DX034-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0241 U	0.0241	1.18	1
11031	12378-PeCDD	40321-76-4	0.0462 JQ	0.0340	5.89	1
11031	123478-HxCDD	39227-28-6	0.0285 U	0.0285	5.89	1
11031	123678-HxCDD	57653-85-7	0.214 J	0.0291	5.89	1
11031	123789-HxCDD	19408-74-3	0.323 J	0.0290	5.89	1
11031	1234678-HpCDD	35822-46-9	0.567 JB	0.0405	5.89	1
11031	OCDD	3268-87-9	3.59 JB	0.0578	11.8	1
11031	2378-TCDF	51207-31-9	0.0185 U	0.0185	1.18	1
11031	12378-PeCDF	57117-41-6	0.0545 JBQ	0.00789	5.89	1
11031	23478-PeCDF	57117-31-4	0.0452 JB	0.00872	5.89	1
11031	123478-HxCDF	70648-26-9	0.0292 JBQ	0.0220	5.89	1
11031	123678-HxCDF	57117-44-9	0.0320 JBQ	0.0155	5.89	1
11031	123789-HxCDF	72918-21-9	0.303 JB	0.0174	5.89	1
11031	234678-HxCDF	60851-34-5	0.0148 U	0.0148	5.89	1
11031	1234678-HpCDF	67562-39-4	0.0516 JB	0.0196	5.89	1
11031	1234789-HpCDF	55673-89-7	0.0250 U	0.0250	5.89	1
11031	OCDF	39001-02-0	0.246 JBQ	0.0490	11.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	48	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	59	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173201
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL101 SDG#: DX034-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173201
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/23/2010 11:20

Suite 210

Reported: 02/10/2011 17:15

Chantilly VA 20151

DL101 SDG#: DX034-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 08:06	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173202
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL117 SDG#: DX034-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	19.4	0.50	0.50	1

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173202
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL117 SDG#: DX034-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0344 JQ	0.0227	1.24	1
11031	12378-PeCDD	40321-76-4	0.0485 JQ	0.0284	6.20	1
11031	123478-HxCDD	39227-28-6	0.0337 JBQ	0.0246	6.20	1
11031	123678-HxCDD	57653-85-7	0.0782 JQ	0.0264	6.20	1
11031	123789-HxCDD	19408-74-3	0.0933 JQ	0.0258	6.20	1
11031	1234678-HpCDD	35822-46-9	2.26 JB	0.0602	6.20	1
11031	OCDD	3268-87-9	33.7 B	0.0533	12.4	1
11031	2378-TCDF	51207-31-9	0.0273 U	0.0273	1.24	1
11031	12378-PeCDF	57117-41-6	0.0459 JB	0.0104	6.20	1
11031	23478-PeCDF	57117-31-4	0.0663 JBQ	0.0112	6.20	1
11031	123478-HxCDF	70648-26-9	0.0334 JBQ	0.0195	6.20	1
11031	123678-HxCDF	57117-44-9	0.0318 JBQ	0.0159	6.20	1
11031	123789-HxCDF	72918-21-9	0.0327 JB	0.0175	6.20	1
11031	234678-HxCDF	60851-34-5	0.0298 JBQ	0.0136	6.20	1
11031	1234678-HpCDF	67562-39-4	0.346 JB	0.0230	6.20	1
11031	1234789-HpCDF	55673-89-7	0.0324 JB	0.0305	6.20	1
11031	OCDF	39001-02-0	1.04 JBQ	0.0442	12.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	65	17 - 157
13C12-1278-TCDD (CRS)	84	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173202
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL117 SDG#: DX034-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173202
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/23/2010 11:20

Suite 210

Reported: 02/10/2011 17:15

Chantilly VA 20151

DL117 SDG#: DX034-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 09:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173203
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL118 SDG#: DX034-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	15.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173203
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL118 SDG#: DX034-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0268 U	0.0268	1.18	1
11031	12378-PeCDD	40321-76-4	0.0471 JQ	0.0309	5.90	1
11031	123478-HxCDD	39227-28-6	0.124 JB	0.0488	5.90	1
11031	123678-HxCDD	57653-85-7	0.390 JQ	0.0482	5.90	1
11031	123789-HxCDD	19408-74-3	0.318 J	0.0467	5.90	1
11031	1234678-HpCDD	35822-46-9	9.38 B	0.0594	5.90	1
11031	OCDD	3268-87-9	118 B	0.0690	11.8	1
11031	2378-TCDF	51207-31-9	0.0377 JBQ	0.0367	1.18	1
11031	12378-PeCDF	57117-41-6	0.104 JB	0.0178	5.90	1
11031	23478-PeCDF	57117-31-4	0.287 JBQ	0.0170	5.90	1
11031	123478-HxCDF	70648-26-9	0.134 JB	0.0382	5.90	1
11031	123678-HxCDF	57117-44-9	0.127 JBQ	0.0301	5.90	1
11031	123789-HxCDF	72918-21-9	0.200 JBQ	0.0297	5.90	1
11031	234678-HxCDF	60851-34-5	0.0877 JBQ	0.0282	5.90	1
11031	1234678-HpCDF	67562-39-4	1.29 JB	0.0290	5.90	1
11031	1234789-HpCDF	55673-89-7	0.157 JBQ	0.0320	5.90	1
11031	OCDF	39001-02-0	4.02 JB	0.0435	11.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	55	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	70	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173203
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.

Submitted: 12/23/2010 11:20

14420 Albemarle Point Place

Reported: 02/10/2011 17:15

Suite 210

Chantilly VA 20151

DL118 SDG#: DX034-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173203
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/23/2010 11:20

Suite 210

Reported: 02/10/2011 17:15

Chantilly VA 20151

DL118 SDG#: DX034-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 09:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1



Analysis Report

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Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173204
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL100 SDG#: DX034-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173204
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL100 SDG#: DX034-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0276 U	0.0276	1.16	1
11031	12378-PeCDD	40321-76-4	0.147 JQ	0.0597	5.81	1
11031	123478-HxCDD	39227-28-6	0.336 JB	0.0827	5.81	1
11031	123678-HxCDD	57653-85-7	1.72 J	0.0849	5.81	1
11031	123789-HxCDD	19408-74-3	0.723 J	0.0810	5.81	1
11031	1234678-HpCDD	35822-46-9	53.1 B	0.102	5.81	1
11031	OCDD	3268-87-9	707 B	0.0952	11.6	1
11031	2378-TCDF	51207-31-9	0.0431 U	0.0431	1.16	1
11031	12378-PeCDF	57117-41-6	0.160 JBQ	0.0142	5.81	1
11031	23478-PeCDF	57117-31-4	0.208 JB	0.0160	5.81	1
11031	123478-HxCDF	70648-26-9	0.324 JB	0.0364	5.81	1
11031	123678-HxCDF	57117-44-9	0.215 JBQ	0.0298	5.81	1
11031	123789-HxCDF	72918-21-9	0.135 JBQ	0.0358	5.81	1
11031	234678-HxCDF	60851-34-5	0.335 JB	0.0321	5.81	1
11031	1234678-HpCDF	67562-39-4	4.69 JB	0.0357	5.81	1
11031	1234789-HpCDF	55673-89-7	0.499 JB	0.0487	5.81	1
11031	OCDF	39001-02-0	11.8 B	0.0373	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	79	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173204
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL100 SDG#: DX034-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173204
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/23/2010 11:20

Suite 210

Reported: 02/10/2011 17:15

Chantilly VA 20151

DL100 SDG#: DX034-08BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 10:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173205
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL100 SDG#: DX034-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173205
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL100 SDG#: DX034-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.4	0.0365	1.16	1
11031	12378-PeCDD	40321-76-4	119	0.0878	5.81	1
11031	123478-HxCDD	39227-28-6	112	0.0827	5.81	1
11031	123678-HxCDD	57653-85-7	117	0.0890	5.81	1
11031	123789-HxCDD	19408-74-3	115	0.0884	5.81	1
11031	1234678-HpCDD	35822-46-9	173	0.110	5.81	1
11031	OCDD	3268-87-9	862	0.0952	11.6	1
11031	2378-TCDF	51207-31-9	22.9	0.0602	1.16	1
11031	12378-PeCDF	57117-41-6	110	0.0235	5.81	1
11031	23478-PeCDF	57117-31-4	110	0.0253	5.81	1
11031	123478-HxCDF	70648-26-9	115	0.0656	5.81	1
11031	123678-HxCDF	57117-44-9	112	0.0535	5.81	1
11031	123789-HxCDF	72918-21-9	114	0.0566	5.81	1
11031	234678-HxCDF	60851-34-5	117	0.0525	5.81	1
11031	1234678-HpCDF	67562-39-4	120	0.0628	5.81	1
11031	1234789-HpCDF	55673-89-7	117	0.0779	5.81	1
11031	OCDF	39001-02-0	243	0.0746	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	71	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173205
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

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14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL100 SDG#: DX034-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173205
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

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14420 Albemarle Point Place

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Suite 210

Reported: 02/10/2011 17:15

Chantilly VA 20151

DL100 SDG#: DX034-08MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 11:52	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173206
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL100 SDG#: DX034-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50	1

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173206
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL100 SDG#: DX034-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.3	0.0437	1.16	1
11031	12378-PeCDD	40321-76-4	116	0.0879	5.81	1
11031	123478-HxCDD	39227-28-6	114	B 0.119	5.81	1
11031	123678-HxCDD	57653-85-7	116	0.122	5.81	1
11031	123789-HxCDD	19408-74-3	113	0.121	5.81	1
11031	1234678-HpCDD	35822-46-9	169	B 0.140	5.81	1
11031	OCDD	3268-87-9	806	B 0.119	11.6	1
11031	2378-TCDF	51207-31-9	23.4	B 0.0628	1.16	1
11031	12378-PeCDF	57117-41-6	109	B 0.0286	5.81	1
11031	23478-PeCDF	57117-31-4	110	B 0.0300	5.81	1
11031	123478-HxCDF	70648-26-9	116	B 0.0884	5.81	1
11031	123678-HxCDF	57117-44-9	114	B 0.0721	5.81	1
11031	123789-HxCDF	72918-21-9	115	B 0.0826	5.81	1
11031	234678-HxCDF	60851-34-5	113	B 0.0692	5.81	1
11031	1234678-HpCDF	67562-39-4	120	B 0.0639	5.81	1
11031	1234789-HpCDF	55673-89-7	117	B 0.0760	5.81	1
11031	OCDF	39001-02-0	243	B 0.0672	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	90	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	91	28 - 130
13C12-123789-HxCDD	91	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	92	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	88	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	99	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173206
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL100 SDG#: DX034-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173206
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/23/2010 11:20

Suite 210

Reported: 02/10/2011 17:15

Chantilly VA 20151

DL100 SDG#: DX034-08MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 12:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173207
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL114 SDG#: DX034-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	19.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173207
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL114 SDG#: DX034-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0498 JQ	0.0228	1.25	1
11031	12378-PeCDD	40321-76-4	0.253 J	0.0355	6.23	1
11031	123478-HxCDD	39227-28-6	0.285 JBQ	0.0636	6.23	1
11031	123678-HxCDD	57653-85-7	0.969 J	0.0651	6.23	1
11031	123789-HxCDD	19408-74-3	0.758 J	0.0651	6.23	1
11031	1234678-HpCDD	35822-46-9	30.3 B	0.0914	6.23	1
11031	OCDD	3268-87-9	423 B	0.0777	12.5	1
11031	2378-TCDF	51207-31-9	0.0312 JBQ	0.0307	1.25	1
11031	12378-PeCDF	57117-41-6	0.183 JB	0.0142	6.23	1
11031	23478-PeCDF	57117-31-4	0.148 JBQ	0.0151	6.23	1
11031	123478-HxCDF	70648-26-9	0.331 JB	0.0352	6.23	1
11031	123678-HxCDF	57117-44-9	0.295 JB	0.0315	6.23	1
11031	123789-HxCDF	72918-21-9	0.224 JBQ	0.0300	6.23	1
11031	234678-HxCDF	60851-34-5	0.249 JB	0.0294	6.23	1
11031	1234678-HpCDF	67562-39-4	3.19 JB	0.0362	6.23	1
11031	1234789-HpCDF	55673-89-7	0.372 JBQ	0.0471	6.23	1
11031	OCDF	39001-02-0	10.4 JB	0.0369	12.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	85	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	86	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173207
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL114 SDG#: DX034-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173207
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/23/2010 11:20

Suite 210

Reported: 02/10/2011 17:15

Chantilly VA 20151

DL114 SDG#: DX034-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 16:48	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1



Analysis Report

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Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173208
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL102 SDG#: DX034-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	11.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173208
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL102 SDG#: DX034-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0226 U	0.0226	1.13	1
11031	12378-PeCDD	40321-76-4	0.140 J	0.0379	5.65	1
11031	123478-HxCDD	39227-28-6	0.274 JBQ	0.0592	5.65	1
11031	123678-HxCDD	57653-85-7	0.993 J	0.0583	5.65	1
11031	123789-HxCDD	19408-74-3	0.633 J	0.0525	5.65	1
11031	1234678-HpCDD	35822-46-9	31.0 B	0.0832	5.65	1
11031	OCDD	3268-87-9	477 B	0.0794	11.3	1
11031	2378-TCDF	51207-31-9	0.0606 JBQ	0.0428	1.13	1
11031	12378-PeCDF	57117-41-6	0.124 JBQ	0.0154	5.65	1
11031	23478-PeCDF	57117-31-4	0.122 JBQ	0.0176	5.65	1
11031	123478-HxCDF	70648-26-9	0.321 JBQ	0.0461	5.65	1
11031	123678-HxCDF	57117-44-9	0.270 JBQ	0.0338	5.65	1
11031	123789-HxCDF	72918-21-9	0.154 JB	0.0304	5.65	1
11031	234678-HxCDF	60851-34-5	0.267 JB	0.0278	5.65	1
11031	1234678-HpCDF	67562-39-4	4.65 JB	0.0458	5.65	1
11031	1234789-HpCDF	55673-89-7	0.487 JB	0.0423	5.65	1
11031	OCDF	39001-02-0	15.7 B	0.0354	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	48	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	57	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173208
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL102 SDG#: DX034-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173208
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/23/2010 11:20

Suite 210

Reported: 02/10/2011 17:15

Chantilly VA 20151

DL102 SDG#: DX034-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 17:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173209
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL024 SDG#: DX034-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	20.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173209
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL024 SDG#: DX034-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0193 U	0.0193	1.25	1
11031	12378-PeCDD	40321-76-4	0.104 J	0.0262	6.27	1
11031	123478-HxCDD	39227-28-6	0.156 JB	0.0466	6.27	1
11031	123678-HxCDD	57653-85-7	0.372 J	0.0464	6.27	1
11031	123789-HxCDD	19408-74-3	0.299 J	0.0445	6.27	1
11031	1234678-HpCDD	35822-46-9	8.82 B	0.0561	6.27	1
11031	OCDD	3268-87-9	80.2 B	0.0553	12.5	1
11031	2378-TCDF	51207-31-9	0.0363 JBQ	0.0330	1.25	1
11031	12378-PeCDF	57117-41-6	0.122 JBQ	0.0123	6.27	1
11031	23478-PeCDF	57117-31-4	0.109 JBQ	0.0135	6.27	1
11031	123478-HxCDF	70648-26-9	0.202 JB	0.0356	6.27	1
11031	123678-HxCDF	57117-44-9	0.154 JB	0.0257	6.27	1
11031	123789-HxCDF	72918-21-9	0.227 JB	0.0276	6.27	1
11031	234678-HxCDF	60851-34-5	0.228 JB	0.0228	6.27	1
11031	1234678-HpCDF	67562-39-4	0.949 JB	0.0273	6.27	1
11031	1234789-HpCDF	55673-89-7	0.228 JB	0.0357	6.27	1
11031	OCDF	39001-02-0	2.68 JB	0.0425	12.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	85	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	50	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	65	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173209
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL024 SDG#: DX034-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173209
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

CDM Federal Programs Corp.

Submitted: 12/23/2010 11:20

14420 Albemarle Point Place

Reported: 02/10/2011 17:15

Suite 210

Chantilly VA 20151

DL024 SDG#: DX034-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 18:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173210
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL157 SDG#: DX034-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173210
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL157 SDG#: DX034-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0180 U	0.0180	1.10	1
11031	12378-PeCDD	40321-76-4	0.0595 JQ	0.0232	5.49	1
11031	123478-HxCDD	39227-28-6	0.0315 JBQ	0.0279	5.49	1
11031	123678-HxCDD	57653-85-7	0.416 JQ	0.0261	5.49	1
11031	123789-HxCDD	19408-74-3	0.557 J	0.0233	5.49	1
11031	1234678-HpCDD	35822-46-9	1.24 JB	0.0349	5.49	1
11031	OCDD	3268-87-9	19.6 B	0.0430	11.0	1
11031	2378-TCDF	51207-31-9	0.0410 JBQ	0.0234	1.10	1
11031	12378-PeCDF	57117-41-6	0.108 JB	0.00823	5.49	1
11031	23478-PeCDF	57117-31-4	0.113 JB	0.0104	5.49	1
11031	123478-HxCDF	70648-26-9	0.0722 JBQ	0.0293	5.49	1
11031	123678-HxCDF	57117-44-9	0.0787 JBQ	0.0182	5.49	1
11031	123789-HxCDF	72918-21-9	0.324 JBQ	0.0172	5.49	1
11031	234678-HxCDF	60851-34-5	0.0783 JBQ	0.0156	5.49	1
11031	1234678-HpCDF	67562-39-4	0.213 JB	0.0184	5.49	1
11031	1234789-HpCDF	55673-89-7	0.0557 JB	0.0231	5.49	1
11031	OCDF	39001-02-0	0.566 JBQ	0.0403	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	86	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	97	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	41	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	60	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	90	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173210
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL157 SDG#: DX034-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173210
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

DL157 SDG#: DX034-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 19:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173211
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

D1584 SDG#: DX034-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173211
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

D1584 SDG#: DX034-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0192 U	0.0192	1.11	1
11031	12378-PeCDD	40321-76-4	0.0711 J	0.0254	5.54	1
11031	123478-HxCDD	39227-28-6	0.0288 U	0.0288	5.54	1
11031	123678-HxCDD	57653-85-7	0.380 J	0.0293	5.54	1
11031	123789-HxCDD	19408-74-3	0.742 J	0.0271	5.54	1
11031	1234678-HpCDD	35822-46-9	0.636 JBQ	0.0316	5.54	1
11031	OCDD	3268-87-9	9.91 JB	0.0299	11.1	1
11031	2378-TCDF	51207-31-9	0.0213 U	0.0213	1.11	1
11031	12378-PeCDF	57117-41-6	0.0608 JBQ	0.0103	5.54	1
11031	23478-PeCDF	57117-31-4	0.0667 JBQ	0.0114	5.54	1
11031	123478-HxCDF	70648-26-9	0.0499 JBQ	0.0186	5.54	1
11031	123678-HxCDF	57117-44-9	0.0743 JBQ	0.0145	5.54	1
11031	123789-HxCDF	72918-21-9	0.441 JB	0.0162	5.54	1
11031	234678-HxCDF	60851-34-5	0.0421 JB	0.0139	5.54	1
11031	1234678-HpCDF	67562-39-4	0.119 JBQ	0.0150	5.54	1
11031	1234789-HpCDF	55673-89-7	0.0346 JBQ	0.0178	5.54	1
11031	OCDF	39001-02-0	0.258 JB	0.0253	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173211
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

D1584 SDG#: DX034-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173211
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/23/2010 11:20

Suite 210

Reported: 02/10/2011 17:15

Chantilly VA 20151

D1584 SDG#: DX034-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 20:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173212
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

D1589 SDG#: DX034-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173212
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

D1589 SDG#: DX034-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0194 JQ	0.0171	1.11	1
11031	12378-PeCDD	40321-76-4	0.0256 JQ	0.0204	5.57	1
11031	123478-HxCDD	39227-28-6	0.0248 JBQ	0.0183	5.57	1
11031	123678-HxCDD	57653-85-7	0.0946 JQ	0.0184	5.57	1
11031	123789-HxCDD	19408-74-3	0.199 JQ	0.0179	5.57	1
11031	1234678-HpCDD	35822-46-9	0.294 JB	0.0279	5.57	1
11031	OCDD	3268-87-9	1.64 JB	0.0320	11.1	1
11031	2378-TCDF	51207-31-9	0.0128 U	0.0128	1.11	1
11031	12378-PeCDF	57117-41-6	0.0315 JBQ	0.00702	5.57	1
11031	23478-PeCDF	57117-31-4	0.0464 JBQ	0.00758	5.57	1
11031	123478-HxCDF	70648-26-9	0.0361 JB	0.0158	5.57	1
11031	123678-HxCDF	57117-44-9	0.0250 JBQ	0.0118	5.57	1
11031	123789-HxCDF	72918-21-9	0.169 JB	0.0129	5.57	1
11031	234678-HxCDF	60851-34-5	0.0117 JBQ	0.0111	5.57	1
11031	1234678-HpCDF	67562-39-4	0.0436 JB	0.0129	5.57	1
11031	1234789-HpCDF	55673-89-7	0.0415 JBQ	0.0172	5.57	1
11031	OCDF	39001-02-0	0.141 JB	0.0247	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	63	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173212
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

D1589 SDG#: DX034-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173212
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

CDM Federal Programs Corp.

Submitted: 12/23/2010 11:20

14420 Albemarle Point Place

Reported: 02/10/2011 17:15

Suite 210

Chantilly VA 20151

D1589 SDG#: DX034-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 21:31	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1



Analysis Report

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Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173213
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

D1454 SDG#: DX034-15*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173213
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

D1454 SDG#: DX034-15*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0161 U	0.0161	1.14	1
11031	12378-PeCDD	40321-76-4	0.0271 J	0.0260	5.72	1
11031	123478-HxCDD	39227-28-6	0.0196 U	0.0196	5.72	1
11031	123678-HxCDD	57653-85-7	0.126 JQ	0.0193	5.72	1
11031	123789-HxCDD	19408-74-3	0.182 JQ	0.0191	5.72	1
11031	1234678-HpCDD	35822-46-9	0.251 JB	0.0280	5.72	1
11031	OCDD	3268-87-9	1.37 JBQ	0.0307	11.4	1
11031	2378-TCDF	51207-31-9	0.0127 U	0.0127	1.14	1
11031	12378-PeCDF	57117-41-6	0.0333 JBQ	0.00709	5.72	1
11031	23478-PeCDF	57117-31-4	0.0551 JBQ	0.00847	5.72	1
11031	123478-HxCDF	70648-26-9	0.0352 JBQ	0.0192	5.72	1
11031	123678-HxCDF	57117-44-9	0.0161 JB	0.0124	5.72	1
11031	123789-HxCDF	72918-21-9	0.268 JB	0.0119	5.72	1
11031	234678-HxCDF	60851-34-5	0.0315 JB	0.0114	5.72	1
11031	1234678-HpCDF	67562-39-4	0.0803 JBQ	0.0168	5.72	1
11031	1234789-HpCDF	55673-89-7	0.0257 JBQ	0.0167	5.72	1
11031	OCDF	39001-02-0	0.134 JB	0.0244	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	44	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	57	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173213
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

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Suite 210
Chantilly VA 20151

Submitted: 12/23/2010 11:20

Reported: 02/10/2011 17:15

D1454 SDG#: DX034-15*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173213
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/23/2010 11:20

Suite 210

Reported: 02/10/2011 17:15

Chantilly VA 20151

D1454 SDG#: DX034-15*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 22:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/10/11 at 05:15 PM

Group Number: 1226931

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11007162401B 28a Moisture Content by 160.3	Sample number(s): 6173197,6173200-6173201,6173204-6173206,6173208-6173212 100 80-120								

Batch number: 11014162401A 28a Moisture Content by 160.3	Sample number(s): 6173202-6173203,6173207,6173213 100 80-120								

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11018001	Sample number(s): 6173198-6173199								
2378-TCDD	0.196 J	0.0833	2.00	pg/l	85		67-158		
12378-PeCDD	0.436 J	0.126	10.0	pg/l	89		70-142		
123478-HxCDD	0.582 J	0.115	10.0	pg/l	93		70-164		
123678-HxCDD	0.636 J	0.118	10.0	pg/l	91		76-134		
123789-HxCDD	0.695 J	0.115	10.0	pg/l	93		64-162		
1234678-HpCDD	2.11 J	0.199	10.0	pg/l	97		70-140		
OCDD	7.03 J	0.430	20.0	pg/l	108		78-144		
2378-TCDF	0.133 J	0.0727	2.00	pg/l	86		75-158		
12378-PeCDF	0.316 J	0.0483	10.0	pg/l	90		80-134		
23478-PeCDF	0.610 J	0.0452	10.0	pg/l	88		68-160		
123478-HxCDF	0.509 J	0.0809	10.0	pg/l	91		72-134		
123678-HxCDF	0.532 J	0.0749	10.0	pg/l	89		84-130		
123789-HxCDF	0.680 J	0.0917	10.0	pg/l	88		78-130		
234678-HxCDF	0.551 J	0.0781	10.0	pg/l	89		70-156		
1234678-HpCDF	1.21 J	0.0929	10.0	pg/l	96		82-122		
1234789-HpCDF	0.676 J	0.129	10.0	pg/l	95		78-138		
OCDF	3.35 J	0.351	20.0	pg/l	106		63-170		
Batch number: 11018002	Sample number(s): 6173197,6173200-6173213								
2378-TCDD	0.0201 U	0.0201	1.00	ng/kg	98		67-158		
12378-PeCDD	0.0240 U	0.0240	5.00	ng/kg	100		70-142		
123478-HxCDD	0.0290 J	0.0244	5.00	ng/kg	99		70-164		
123678-HxCDD	0.0249 U	0.0249	5.00	ng/kg	99		76-134		
123789-HxCDD	0.0239 U	0.0239	5.00	ng/kg	99		64-162		
1234678-HpCDD	0.244 J	0.0439	5.00	ng/kg	98		70-140		
OCDD	0.827 J	0.0486	10.0	ng/kg	101		78-144		
2378-TCDF	0.0195 J	0.0156	1.00	ng/kg	102		75-158		
12378-PeCDF	0.0353 J	0.00680	5.00	ng/kg	96		80-134		
23478-PeCDF	0.0543 J	0.00880	5.00	ng/kg	95		68-160		
123478-HxCDF	0.0386 J	0.0146	5.00	ng/kg	99		72-134		
123678-HxCDF	0.0440 J	0.0119	5.00	ng/kg	98		84-130		
123789-HxCDF	0.0458 J	0.0145	5.00	ng/kg	98		78-130		
234678-HxCDF	0.0450 J	0.0125	5.00	ng/kg	99		70-156		
1234678-HpCDF	0.0317 J	0.0202	5.00	ng/kg	97		82-122		
1234789-HpCDF	0.0484 J	0.0319	5.00	ng/kg	101		78-138		
OCDF	0.165 J	0.0371	10.0	ng/kg	100		63-170		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/10/11 at 05:15 PM

Group Number: 1226931

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11007162401B	Sample number(s): 6173197, 6173200-6173201, 6173204-6173206, 6173208-6173212 BKG: P173167								
28a Moisture Content by 160.3						13.9	12.7	8	20
Batch number: 11014162401A	Sample number(s): 6173202-6173203, 6173207, 6173213 BKG: P182836								
28a Moisture Content by 160.3						12.3	13.1	6	20
Batch number: 11018002	Sample number(s): 6173197, 6173200-6173213 UNSPK: 6173204								
2378-TCDD	96	100	67-158	4	25				
12378-PeCDD	102	100	70-142	2	25				
123478-HxCDD	96	98	70-164	1	25				
123678-HxCDD	99	98	76-134	1	25				
123789-HxCDD	98	96	64-162	2	25				
1234678-HpCDD	103	100	70-140	2	25				
OCDD	67*	43*	78-144	7	25				
2378-TCDF	98	101	75-158	2	25				
12378-PeCDF	95	94	80-134	1	25				
23478-PeCDF	94	95	68-160	1	25				
123478-HxCDF	99	100	72-134	1	25				
123678-HxCDF	96	98	84-130	2	25				
123789-HxCDF	98	99	78-130	1	25				
234678-HxCDF	101	97	70-156	3	25				
1234678-HpCDF	99	100	82-122	1	25				
1234789-HpCDF	100	100	78-138	0	25				
OCDF	100	99	63-170	0	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11018001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6173198	60	62	58	58	58	54
6173199	68	71	68	69	69	66
Blank	89	94	89	90	90	86
OPR	69	76	76	75	75	70
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/10/11 at 05:15 PM

Group Number: 1226931

Surrogate Quality Control

6173198	50	42	28	81	59	58
6173199	61	54	37	79	69	72
Blank	71	62	37	96	88	89
OPR	59	50	28	82	73	73

Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF

6173198	57	57	48	35	66	60
6173199	70	70	59	44	72	71
Blank	86	86	66	41	95	93
OPR	72	71	53	30	75	73

Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11018002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF

6173197	82	82	57	81	77	72
6173200	83	75	65	82	75	77
6173201	70	66	48	66	66	60
6173202	75	70	59	73	78	72
6173203	74	71	55	68	71	73
6173204	74	75	70	85	77	75
6173205	79	75	65	79	76	79
6173206	90	82	72	88	87	80
6173207	85	76	70	80	80	88
6173208	79	73	48	66	75	78
6173209	85	73	50	69	75	69
6173210	86	72	41	64	75	71
6173211	83	70	56	73	73	71
6173212	80	70	57	72	73	70
6173213	76	68	44	67	70	74
Blank	77	74	70	89	78	74
MS	79	75	65	79	76	79
MSD	90	82	72	88	87	80
OPR	73	72	68	80	78	79

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

6173197	73	67	67	94	83	80
6173200	74	67	72	91	77	81
6173201	59	55	53	81	64	69
6173202	70	63	65	84	72	80
6173203	62	68	70	82	69	72
6173204	81	73	79	87	76	83
6173205	73	70	71	86	72	81
6173206	76	76	75	99	82	90
6173207	81	75	86	91	78	83
6173208	57	73	75	85	72	73
6173209	65	61	58	85	74	76

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/10/11 at 05:15 PM

Group Number: 1226931

Surrogate Quality Control

6173210	60	57	55	90	77	72
6173211	72	73	74	86	72	78
6173212	70	64	63	91	70	76
6173213	57	69	74	81	69	70
Blank	87	66	67	90	78	84
MS	73	70	71	86	72	81
MSD	76	76	75	99	82	90
OPR	80	69	68	88	72	82
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6173197	83	82	84	87	81	105
6173200	79	81	81	85	81	96
6173201	70	71	70	64	70	76
6173202	79	79	76	77	76	79
6173203	74	75	73	73	76	74
6173204	83	80	83	86	78	89
6173205	79	79	80	81	79	85
6173206	91	91	84	80	92	91
6173207	84	84	82	92	82	87
6173208	76	79	79	83	82	89
6173209	81	83	81	80	78	86
6173210	80	86	79	79	80	97
6173211	78	81	89	89	76	81
6173212	79	80	81	79	80	81
6173213	74	75	77	81	75	87
Blank	86	86	83	89	75	95
MS	79	79	80	81	79	85
MSD	91	91	84	80	92	91
OPR	82	83	78	76	72	82
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

13013 1226931 6173197-213

CHAIN OF CUSTODY RECORD

CDM SSPL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD																Other Instructions and Notes									
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP																															
Samplers: (Signature) <i>Tracey Patterson</i>																															
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8160B	1,4-Dioxane EPA 8210-8	SVOCs EPA 8210-8 & PAHs 8270-5M	TPH-EPA 8015B	**TPH-EPA 8015B Mod.	*Metals EPA 6010/6000/6010/471A	*Hex Chrome EPA 7199*	*Fluoride EPA 800.0	*PCBs EPA 8081	*Dioxin/Furan EPA 1631B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8215A	**H-DNA EPA 1625C	**Emergent EPA 8350A	**Cyanide EPA 8012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B			
DUP10-SASB-QC-122210	12.22.10	0905	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												SURFACE DUP
EB08-SASB-122210	12.22.10	1145	water	none	6-1 liter ambers			X						X	X			X	X												surface tool rinse
EB08-SASB-122210	12.22.10	1145	water	none	1-500 ml poly								X	X		X															surface tool rinse
EB08-SASB-122210	12.22.10	1145	water	HNO3	1-500 ml poly						X																				surface tool rinse
FB06-SASB-122210-122210	12.22.10	1330	water	HCl	6-40 mL VOA vials	X	X																								
FB06-SASB-122210	12.22.10	1330	water	none	6-1 liter ambers			X						X	X			X	X												surface tool rinse
FB06-SASB-122210	12.22.10	1330	water	none	1-500 ml poly							X	X			X															surface tool rinse
FB06-SASB-122210	12.22.10	1330	water	HNO3	1-500 ml poly					X																					surface tool rinse
FB06-SASB-122210	12.22.10	1330	water	HCl	5-40 mL VOA vials			X																					X		surface tool rinse
FB06-SASB-122210	12.22.10	1330	water	none	4-40 mL VOA vials														X										X		surface tool rinse
FB06-SASB-122210	12.22.10	1330	water	none	4-1L ambers				X												X	X						X			surface tool rinse
FB06-SASB-122210	12.22.10	1330	water	none	1-250 mL glass bottle															X											surface tool rinse
FB06-SASB-122210	12.22.10	1330	water	NaOH	1-500 mL poly																			X							surface tool rinse
SED-010-SV-SO-0.0-0.5	12.22.10	1010	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-101-SASB-SS-0.0-0.5	12.22.10	0900	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-117-SASB-SS-0.0-0.5	12.22.10	0925	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-117-SASB-SS-0.0-0.5	12.22.10	0925	soil	none	1 x 16 oz. jar				X										X	X	X	X	X	X	X	X	X	X	X	X	
SL-117-SASB-SS-0.0-0.5	12.22.10	0910	soil	none	5 Encore Samplers	X	X	X																							
SL-118-SASB-SS-0.0-0.5	12.22.10	0910	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-118-SASB-SS-0.0-0.5	12.22.10	0910	soil	none	1 x 16 oz. jar				X										X	X	X	X	X	X	X	X	X	X	X	X	
SL-118-SASB-SS-0.0-0.5	12.22.10	0910	soil	none	5 Encore Samplers	X	X	X																							
SL-100-SASB-SS-0.0-0.5MS	12.22.10	0902	soil	none	2 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X												surface MS/MSD
SL-114-SASB-SS-0.0-0.5	12.22.10	0922	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-114-SASB-SS-0.0-0.5	12.22.10	0922	soil	none	1 x 16 oz. jar				X										X	X	X	X	X	X	X	X	X	X	X	X	
SL-114-SASB-SS-0.0-0.5	12.22.10	0922	soil	none	5 Encore Samplers	X	X	X																							
SL-102-SASB-SS-0.0-0.5	12.22.10	0936	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-024-SASB-SS-0.0-0.5	12.22.10	1001	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X												
SL-157-SASB-SB-4.0-5.0	12.22.10	1048	soil	none	2 16 oz jars			X			X	X	X	X	X	X															
SL-157-SASB-SB-4.5	12.22.10	1045	soil	none	4 Encore Samplers	X	X																								
SL-158-SASB-SB-4.0-5.0	12.22.10	1209	soil	none	2 16 oz jars			X			X	X	X	X	X	X															
SL-158-SASB-SB-4.5	12.22.10	1201	soil	none	4 Encore Samplers	X	X																								
SL-158-SASB-SB-9.0-10.0	12.22.10	1052	soil	none	2 16 oz jars			X			X	X	X	X	X	X															
SL-145-SASB-SB-4.0-5.0	12.22.10	1454	soil	none	4 16 oz jars			X			X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	
SL-145-SASB-SB-4.5	12.22.10	1450	soil	none	5 Encore Samplers	X	X	X																							
TB-122210	12.22.10	1300	water	HCl	4-40 mL clear VOA vials	X	X	X																							trip blank
Date/Time: 12.22.10 1630 Recipient Laboratory Signature: <i>[Signature]</i> Date/Time: 12/23/10 16120 Tracking Numbers 8695 1431 7947 8695 1431 7958, 8695 1431 9880, 8695 1431 9891, 8695 1432 3563																						Laboratory: Lancaster Laboratories, Inc. No. of coolers = 5									

SL-158-SASB-SB-9.0-10.0 was updated to SL-157-SASB-SB-9.0-10.0 and the collection date in the FB ID was changed to 122210 per PB on 12/23/10.

NLM 12/29/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 08, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 01/14/2011

Group Number: 1229054

SDG: DE060

PO Number: 1203-004-007-AL

Release Number: Tracking #11667

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-073-SA5B-SB-4.0-5.0 Soil	6183546
SL-301-SA5B-SB-4.0-5.0 Soil	6183547
SL-301-SA5B-SB-7.5-8.5 Soil	6183548
SL-074-SA5B-SB-4.0-5.0 Soil	6183549
SL-074-SA5B-SB-7.0-8.0 Soil	6183550
SL-121-SA5B-SB-4.0-5.0 Soil	6183551
SL-121-SA5B-SB-9.0-10.0 Soil	6183552
SL-120-SA5B-SB-3.0-4.0 Soil	6183553
SL-119-SA5B-SB-3.0-4.0 Soil	6183554
SED-009-SIV-SD-0.0-0.5 Sediment	6183555
SED-028-SIV-SD-0.0-0.5 Sediment	6183556
SL-122-SA5B-SB-2.0-3.0 Soil	6183557
EB20-SA5B-011311 Water	6183558
EB21-SA5B-011311 Water	6183559
TB-011311 Water	6183560

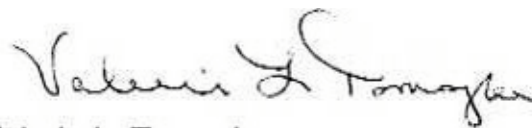
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO
1 COPY TO CDM Federal Services Program
Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Valerie L. Tomayko
Group Leader

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL073 SDG#: DE060-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.4 U	7.4	8.8	0.97
06192	Benzene	71-43-2	0.11 U	0.11	4.4	0.97
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.4	0.97
06192	Bromochloromethane	74-97-5	0.36 U	0.36	4.4	0.97
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.4	0.97
06192	Bromoform	75-25-2	0.44 U	0.44	4.4	0.97
06192	Bromomethane	74-83-9	0.28 U	0.28	4.4	0.97
06192	2-Butanone	78-93-3	1.3 U	1.3	8.8	0.97
06192	n-Butylbenzene	104-51-8	0.13 U	0.13	4.4	0.97
06192	sec-Butylbenzene	135-98-8	0.07 U	0.07	4.4	0.97
06192	tert-Butylbenzene	98-06-6	0.18 U	0.18	4.4	0.97
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.4	0.97
06192	Chlorobenzene	108-90-7	0.12 U	0.12	4.4	0.97
06192	Chloroethane	75-00-3	0.14 U	0.14	4.4	0.97
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.33 U	0.33	4.4	0.97
06192	Chloroform	67-66-3	0.13 U	0.13	4.4	0.97
06192	Chloromethane	74-87-3	0.36 U	0.36	4.4	0.97
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.4	0.97
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.4	0.97
06192	Chlorotrifluoroethene	79-38-9	0.55 U	0.55	5.5	0.97
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.77 U	0.77	4.4	0.97
06192	Dibromochloromethane	124-48-1	0.22 U	0.22	4.4	0.97
06192	1,2-Dibromoethane	106-93-4	0.19 U	0.19	4.4	0.97
06192	Dibromomethane	74-95-3	0.27 U	0.27	4.4	0.97
06192	1,2-Dichlorobenzene	95-50-1	0.1 U	0.1	4.4	0.97
06192	1,3-Dichlorobenzene	541-73-1	0.13 U	0.13	4.4	0.97
06192	1,4-Dichlorobenzene	106-46-7	0.18 U	0.18	4.4	0.97
06192	Dichlorodifluoromethane	75-71-8	0.13 U	0.13	4.4	0.97
06192	1,1-Dichloroethane	75-34-3	0.11 U	0.11	4.4	0.97
06192	1,2-Dichloroethane	107-06-2	0.17 U	0.17	4.4	0.97
06192	1,1-Dichloroethene	75-35-4	0.43 U	0.43	4.4	0.97
06192	cis-1,2-Dichloroethene	156-59-2	0.21 U	0.21	4.4	0.97
06192	trans-1,2-Dichloroethene	156-60-5	0.13 U	0.13	4.4	0.97
06192	1,2-Dichloropropane	78-87-5	0.19 U	0.19	4.4	0.97
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.4	0.97
06192	2,2-Dichloropropane	594-20-7	0.19 U	0.19	4.4	0.97
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.4	0.97
06192	cis-1,3-Dichloropropene	10061-01-5	0.18 U	0.18	4.4	0.97
06192	trans-1,3-Dichloropropene	10061-02-6	0.19 U	0.19	4.4	0.97
06192	Ethylbenzene	100-41-4	0.07 U	0.07	4.4	0.97
06192	Freon 113	76-13-1	0.12 U	0.12	4.4	0.97
06192	Freon 133a	75-88-7	0.55 U	0.55	5.5	0.97
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.4	0.97
06192	2-Hexanone	591-78-6	1.8 U	1.8	8.8	0.97
06192	Isopropylbenzene	98-82-8	0.07 U	0.07	4.4	0.97
06192	p-Isopropyltoluene	99-87-6	0.12 U	0.12	4.4	0.97
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.23 U	0.23	4.4	0.97
06192	4-Methyl-2-pentanone	108-10-1	0.43 U	0.43	8.8	0.97
06192	Methylene Chloride	75-09-2	0.57 J	0.27	4.4	0.97
06192	n-Propylbenzene	103-65-1	0.08 U	0.08	4.4	0.97

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL073 SDG#: DE060-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.11 U	0.11	4.4	0.97
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12 U	0.12	4.4	0.97
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.25 U	0.25	4.4	0.97
06192	Tetrachloroethene	127-18-4	0.22 U	0.22	4.4	0.97
06192	Toluene	108-88-3	0.09 U	0.09	4.4	0.97
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.4	0.97
06192	1,2,4-Trichlorobenzene	120-82-1	0.20 U	0.20	4.4	0.97
06192	1,1,1-Trichloroethane	71-55-6	0.22 U	0.22	4.4	0.97
06192	1,1,2-Trichloroethane	79-00-5	0.30 U	0.30	4.4	0.97
06192	Trichloroethene	79-01-6	0.17 U	0.17	4.4	0.97
06192	Trichlorofluoromethane	75-69-4	0.32 U	0.32	4.4	0.97
06192	1,2,3-Trichloropropane	96-18-4	0.36 U	0.36	4.4	0.97
06192	1,2,4-Trimethylbenzene	95-63-6	0.44 U	0.44	4.4	0.97
06192	1,3,5-Trimethylbenzene	108-67-8	0.11 U	0.11	4.4	0.97
06192	Vinyl Chloride	75-01-4	0.22 U	0.22	4.4	0.97
06192	m+p-Xylene	179601-23-1	0.19 U	0.19	4.4	0.97
06192	o-Xylene	95-47-6	0.19 U	0.19	4.4	0.97
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.6 U	4.6	14	20.23
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190 U	190	570	1
04688	Benzidine	92-87-5	1,300 U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190 U	190	570	1
04688	Benzyl alcohol	100-51-6	190 U	190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19 U	19	190	1
04688	Carbazole	86-74-8	19 U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38 U	38	190	1
04688	4-Chloroaniline	106-47-8	76 U	76	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19 U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19 U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19 U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19 U	19	190	1
04688	2-Chlorophenol	95-57-8	19 U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38 U	38	190	1
04688	Dibenzofuran	132-64-9	19 U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19 U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19 U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19 U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110 U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19 U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38 U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38 U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190 U	190	570	1
04688	2,4-Dinitrophenol	51-28-5	760 U	760	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38 U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19 U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19 U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL073 SDG#: DE060-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	38	J 19	380	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	38	U 38	190	1
04688	4-Methylphenol	106-44-5	38	U 38	190	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	38	U 38	190	1
04688	4-Nitroaniline	100-01-6	76	U 76	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	26	J 19	190	1
04688	Pentachlorophenol	87-86-5	190	U 190	570	1
04688	Phenol	108-95-2	19	U 19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9	1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.76	U 0.76	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.76	U 0.76	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U 0.76	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U 0.76	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U 0.76	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21	1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21	1
10138	Chrysene	218-01-9	0.38	U 0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U 0.76	1.9	1
10138	Diethylphthalate	84-66-2	6.9	U 6.9	21	1
10138	Dimethylphthalate	131-11-3	6.9	U 6.9	21	1
10138	Fluoranthene	206-44-0	0.76	U 0.76	1.9	1
10138	Fluorene	86-73-7	0.76	U 0.76	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U 0.76	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL073 SDG#: DE060-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM						
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9	1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9	1
10138	Phenanthrene	85-01-8	0.76 U	0.76	1.9	1
10138	Pyrene	129-00-0	0.76 U	0.76	1.9	1
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.57 U	0.57	1.9	1
10225	PCB-1232	11141-16-5	0.59 U	0.59	1.9	1
10225	PCB-1242	53469-21-9	0.57 U	0.57	1.9	1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9	1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9	1
10225	PCB-1260	11096-82-5	0.38 U	0.38	1.9	1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9	1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	30,400	27.6	110	5
07914	Boron	7440-42-8	4.89 U	4.89	27.5	5
Reporting limits were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	5,390	6.74	22.0	1
01654	Iron	7439-89-6	44,900	25.9	110	5
01656	Lithium	7439-93-2	53.7	0.24	2.2	1
01657	Magnesium	7439-95-4	9,860	2.79	11.0	1
06958	Manganese	7439-96-5	375	0.0857	0.549	1
10145	Phosphorus	7723-14-0	727	3.08	54.9	5
01662	Potassium	7440-09-7	3,810	98.9	275	5
01667	Sodium	7440-23-5	641	41.0	110	1
07968	Strontium	7440-24-6	37.5	0.0681	0.549	1
06969	Tin	7440-31-5	3.41 J	1.10	11.0	1
06970	Titanium	7440-32-6	1,940	2.09	5.49	5
10146	Zirconium	7440-67-7	1.25 J	0.923	5.49	1
SW-846 6020						
06124	Antimony	7440-36-0	0.311	0.0659	0.220	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	13.4	0.0879	0.440	2
06126	Barium	7440-39-3	163	0.119	0.440	2
06127	Beryllium	7440-41-7	1.28	0.0176	0.110	2
06128	Cadmium	7440-43-9	0.132	0.0440	0.110	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
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Reported: 02/08/2011 13:21

SL073 SDG#: DE060-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06131	Chromium	7440-47-3	36.0	0.132	0.440	2
06132	Cobalt	7440-48-4	10.9	0.0220	0.110	2
06133	Copper	7440-50-8	23.5	0.0725	0.440	2
06135	Lead	7439-92-1	15.6	0.0114	0.220	2
06138	Molybdenum	7439-98-7	0.662	0.0549	0.110	2
06139	Nickel	7440-02-0	19.3	0.110	0.440	2
06141	Selenium	7782-49-2	0.149 J	0.0440	0.440	2
06142	Silver	7440-22-4	0.0698 J	0.0132	0.110	2
06145	Thallium	7440-28-0	0.380	0.0330	0.110	2
06148	Vanadium	7440-62-2	66.9	0.0242	0.110	2
06149	Zinc	7440-66-6	86.5	0.615	3.30	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0054 J	0.0031	0.107	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	7.3	0.91	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.3	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.57 J	0.23	1.1	1
	ASTM D1498		mV	mV	mV	
01821	32a OR Potential	n.a.	440	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.74	0.0100	0.0100	1
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	12.5	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-073-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL073 SDG#: DE060-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/17/2011 22:06	Laura M Krieger	0.97
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 16:20	Jason M Long	20.23
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 14:51	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 14:52	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 09:27	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 10:07	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 16:41	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:15	John P Hook	5
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:15	John P Hook	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
01654	Iron	SW-846 6010B	1	110195708001	01/21/2011 20:15	John P Hook	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:11	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:15	John P Hook	5
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:15	John P Hook	5
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:15	John P Hook	5
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:22	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:22	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:22	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL073 SDG#: DE060-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 11:57	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 08:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201A	01/24/2011 19:51	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 15:44	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201A	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102A	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402A	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401A	01/19/2011 19:05	Scott W Freisher	1

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3014 SDG#: DE060-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.6 U	6.6	7.9	0.88
06192	Benzene	71-43-2	0.1 U	0.1	3.9	0.88
06192	Bromobenzene	108-86-1	0.13 U	0.13	3.9	0.88
06192	Bromochloromethane	74-97-5	0.32 U	0.32	3.9	0.88
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	3.9	0.88
06192	Bromoform	75-25-2	0.39 U	0.39	3.9	0.88
06192	Bromomethane	74-83-9	0.25 U	0.25	3.9	0.88
06192	2-Butanone	78-93-3	1.2 U	1.2	7.9	0.88
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	3.9	0.88
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	3.9	0.88
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	3.9	0.88
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	3.9	0.88
06192	Chlorobenzene	108-90-7	0.11 U	0.11	3.9	0.88
06192	Chloroethane	75-00-3	0.13 U	0.13	3.9	0.88
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30 U	0.30	3.9	0.88
06192	Chloroform	67-66-3	0.12 U	0.12	3.9	0.88
06192	Chloromethane	74-87-3	0.32 U	0.32	3.9	0.88
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	3.9	0.88
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	3.9	0.88
06192	Chlorotrifluoroethene	79-38-9	0.49 U	0.49	4.9	0.88
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.69 U	0.69	3.9	0.88
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	3.9	0.88
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	3.9	0.88
06192	Dibromomethane	74-95-3	0.24 U	0.24	3.9	0.88
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	3.9	0.88
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	3.9	0.88
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	3.9	0.88
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	3.9	0.88
06192	1,1-Dichloroethane	75-34-3	0.1 U	0.1	3.9	0.88
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	3.9	0.88
06192	1,1-Dichloroethene	75-35-4	0.38 U	0.38	3.9	0.88
06192	cis-1,2-Dichloroethene	156-59-2	0.19 U	0.19	3.9	0.88
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	3.9	0.88
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	3.9	0.88
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	3.9	0.88
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	3.9	0.88
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	3.9	0.88
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	3.9	0.88
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	3.9	0.88
06192	Ethylbenzene	100-41-4	0.06 U	0.06	3.9	0.88
06192	Freon 113	76-13-1	0.11 U	0.11	3.9	0.88
06192	Freon 133a	75-88-7	0.49 U	0.49	4.9	0.88
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	3.9	0.88
06192	2-Hexanone	591-78-6	1.6 U	1.6	7.9	0.88
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	3.9	0.88
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	3.9	0.88
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	3.9	0.88
06192	4-Methyl-2-pentanone	108-10-1	0.38 U	0.38	7.9	0.88
06192	Methylene Chloride	75-09-2	0.45 J	0.24	3.9	0.88
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	3.9	0.88

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3014 SDG#: DE060-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.1 U	0.1	3.9	0.88
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	3.9	0.88
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23 U	0.23	3.9	0.88
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	3.9	0.88
06192	Toluene	108-88-3	0.08 U	0.08	3.9	0.88
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	3.9	0.88
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	3.9	0.88
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	3.9	0.88
06192	1,1,2-Trichloroethane	79-00-5	0.27 U	0.27	3.9	0.88
06192	Trichloroethene	79-01-6	0.15 U	0.15	3.9	0.88
06192	Trichlorofluoromethane	75-69-4	0.29 U	0.29	3.9	0.88
06192	1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	3.9	0.88
06192	1,2,4-Trimethylbenzene	95-63-6	0.39 U	0.39	3.9	0.88
06192	1,3,5-Trimethylbenzene	108-67-8	0.1 U	0.1	3.9	0.88
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	3.9	0.88
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	3.9	0.88
06192	o-Xylene	95-47-6	0.17 U	0.17	3.9	0.88
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.8 U	4.8	14	21.51
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190 U	190	560	1
04688	Benzidine	92-87-5	1,300 U	1,300	3,700	1
04688	Benzoic acid	65-85-0	190 U	190	560	1
04688	Benzyl alcohol	100-51-6	190 U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19 U	19	190	1
04688	Carbazole	86-74-8	19 U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37 U	37	190	1
04688	4-Chloroaniline	106-47-8	75 U	75	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19 U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19 U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19 U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19 U	19	190	1
04688	2-Chlorophenol	95-57-8	19 U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37 U	37	190	1
04688	Dibenzofuran	132-64-9	19 U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19 U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19 U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19 U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110 U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	19 U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	37 U	37	190	1
04688	3,5-Dimethylphenol	108-68-9	37 U	37	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190 U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	750 U	750	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37 U	37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19 U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19 U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3014 SDG#: DE060-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	21	J 19	370	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	37	U 37	190	1
04688	4-Methylphenol	106-44-5	37	U 37	190	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	37	U 37	190	1
04688	4-Nitroaniline	100-01-6	75	U 75	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	560	1
04688	Phenol	108-95-2	19	U 19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U 0.75	1.9	1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.9	1
10138	Anthracene	120-12-7	0.37	U 0.37	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.75	U 0.75	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.75	U 0.75	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U 0.75	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U 0.75	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U 0.75	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.7	U 6.7	20	1
10138	Di-n-butylphthalate	84-74-2	6.7	U 6.7	20	1
10138	Chrysene	218-01-9	0.37	U 0.37	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U 0.75	1.9	1
10138	Diethylphthalate	84-66-2	6.7	U 6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7	U 6.7	20	1
10138	Fluoranthene	206-44-0	0.75	U 0.75	1.9	1
10138	Fluorene	86-73-7	0.75	U 0.75	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U 0.75	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.75	U 0.75	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3014 SDG#: DE060-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	2-Methylnaphthalene	91-57-6	0.75 U	0.75	1.9	1
10138	Naphthalene	91-20-3	0.75 U	0.75	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.75 U	0.75	1.9	1
10138	Di-n-octylphthalate	117-84-0	8.7 J	6.7	20	1
10138	Phenanthrene	85-01-8	0.75 U	0.75	1.9	1
10138	Pyrene	129-00-0	0.75 U	0.75	1.9	1

Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.

Pesticides/PCBs	SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9
10225	PCB-1232	11141-16-5	0.58 U	0.58	1.9
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9
10225	PCB-1260	11096-82-5	0.37 U	0.37	1.9
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	22,700	5.59	22.2
07914	Boron	7440-42-8	4.94 U	4.94	27.8
Reporting limits for boron were raised due to interference from the sample matrix.					
01650	Calcium	7440-70-2	3,590	6.81	22.2
01654	Iron	7439-89-6	27,900	26.2	111
01656	Lithium	7439-93-2	36.9	0.24	2.2
01657	Magnesium	7439-95-4	6,030	2.82	11.1
06958	Manganese	7439-96-5	284	0.0867	0.556
10145	Phosphorus	7723-14-0	238	0.622	11.1
01662	Potassium	7440-09-7	2,290	20.0	55.6
01667	Sodium	7440-23-5	195	41.4	111
07968	Strontium	7440-24-6	27.5	0.0689	0.556
06969	Tin	7440-31-5	3.01 J	1.11	11.1
06970	Titanium	7440-32-6	1,370	0.422	1.11
10146	Zirconium	7440-67-7	2.28 J	0.933	5.56

	SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.152 J	0.0648	0.216
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3014 SDG#: DE060-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06125	Arsenic	7440-38-2	6.61	0.0863	0.432	2
06126	Barium	7440-39-3	129	0.117	0.432	2
06127	Beryllium	7440-41-7	0.788	0.0173	0.108	2
06128	Cadmium	7440-43-9	0.171	0.0432	0.108	2
06131	Chromium	7440-47-3	25.5	0.130	0.432	2
06132	Cobalt	7440-48-4	6.25	0.0216	0.108	2
06133	Copper	7440-50-8	13.2	0.0712	0.432	2
06135	Lead	7439-92-1	7.55	0.0112	0.216	2
06138	Molybdenum	7439-98-7	0.384	0.0540	0.108	2
06139	Nickel	7440-02-0	16.3	0.108	0.432	2
06141	Selenium	7782-49-2	0.0836 J	0.0432	0.432	2
06142	Silver	7440-22-4	0.0540 J	0.0130	0.108	2
06145	Thallium	7440-28-0	0.322	0.0324	0.108	2
06148	Vanadium	7440-62-2	44.1	0.0237	0.108	2
06149	Zinc	7440-66-6	65.7	0.604	3.24	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.112	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.4	0.90	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.7	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.25 J	0.22	1.1	1
	ASTM D1498		mV	mV	mV	
01821	32a OR Potential	n.a.	421	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.38	0.0100	0.0100	1
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	10.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3014 SDG#: DE060-02

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-301-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/17/2011 22:28	Laura M Krieger	0.88
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 16:40	Jason M Long	21.51
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 14:54	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 14:55	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 10:42	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 11:41	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 17:37	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/24/2011 13:00	Eric L Eby	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/24/2011 13:00	Eric L Eby	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:18	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:26	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/23/2011 18:26	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3014 SDG#: DE060-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/23/2011 18:26	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:26	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:01	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 11:03	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201A	01/24/2011 20:14	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 15:57	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201A	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102A	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402A	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401A	01/19/2011 19:05	Scott W Freisher	1

Sample Description: SL-301-SA5B-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-7.5-8.5

LLI Sample # SW 6183548
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3047 SDG#: DE060-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580	1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900	1
04688	Benzoic acid	65-85-0	190	U 190	580	1
04688	Benzyl alcohol	100-51-6	190	U 190	580	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190	1
04688	Carbazole	86-74-8	19	U 19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	190	1
04688	4-Chloroaniline	106-47-8	77	U 77	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190	1
04688	2-Chlorophenol	95-57-8	19	U 19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	190	1
04688	Dibenzofuran	132-64-9	19	U 19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390	1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190	1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	190	1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580	1
04688	2,4-Dinitrophenol	51-28-5	770	U 770	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	48	J 19	390	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	39	U 39	190	1
04688	4-Methylphenol	106-44-5	39	U 39	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	39	U 39	190	1
04688	4-Nitroaniline	100-01-6	77	U 77	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	580	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	580	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-7.5-8.5

LLI Sample # SW 6183548
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3047 SDG#: DE060-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	19 U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19 U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	39 U	39	190	1
04688	2,4,6-Trichlorophenol	88-06-2	39 U	39	190	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77 U	0.77	1.9	1
10138	Acenaphthylene	208-96-8	0.39 U	0.39	1.9	1
10138	Anthracene	120-12-7	0.39 U	0.39	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.77 U	0.77	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.77 U	0.77	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.77 U	0.77	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.77 U	0.77	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.77 U	0.77	1.9	1
10138	Butylbenzylphthalate	85-68-7	7.0 U	7.0	21	1
10138	Di-n-butylphthalate	84-74-2	7.0 U	7.0	21	1
10138	Chrysene	218-01-9	0.39 U	0.39	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.77 U	0.77	1.9	1
10138	Diethylphthalate	84-66-2	7.0 U	7.0	21	1
10138	Dimethylphthalate	131-11-3	7.0 U	7.0	21	1
10138	Fluoranthene	206-44-0	0.77 U	0.77	1.9	1
10138	Fluorene	86-73-7	0.77 U	0.77	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.77 U	0.77	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.77 U	0.77	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.77 U	0.77	1.9	1
10138	Naphthalene	91-20-3	0.77 U	0.77	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.77 U	0.77	1.9	1
10138	Di-n-octylphthalate	117-84-0	8.6 J	7.0	21	1
10138	Phenanthrene	85-01-8	0.77 U	0.77	1.9	1
10138	Pyrene	129-00-0	0.77 U	0.77	1.9	1
Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.						
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.58 U	0.58	2.0	1
10225	PCB-1232	11141-16-5	0.60 U	0.60	2.0	1
10225	PCB-1242	53469-21-9	0.58 U	0.58	2.0	1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0	1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0	1
10225	PCB-1260	11096-82-5	0.38 U	0.38	2.0	1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0	1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-7.5-8.5

LLI Sample # SW 6183548
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3047 SDG#: DE060-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,800	5.72	22.7	1
07914	Boron	7440-42-8	1.01 U	1.01	5.69	1
01650	Calcium	7440-70-2	2,710	6.97	22.7	1
01654	Iron	7439-89-6	21,100	5.36	22.7	1
01656	Lithium	7439-93-2	37.5	0.25	2.3	1
01657	Magnesium	7439-95-4	4,340	2.89	11.4	1
06958	Manganese	7439-96-5	197	0.0887	0.569	1
10145	Phosphorus	7723-14-0	213	0.637	11.4	1
01662	Potassium	7440-09-7	1,600	20.5	56.9	1
01667	Sodium	7440-23-5	156	42.4	114	1
07968	Strontium	7440-24-6	13.9	0.0705	0.569	1
06969	Tin	7440-31-5	2.48 J	1.14	11.4	1
06970	Titanium	7440-32-6	1,060	0.432	1.14	1
10146	Zirconium	7440-67-7	1.79 J	0.955	5.69	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0737 J	0.0682	0.227	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.93	0.0910	0.455	2
06126	Barium	7440-39-3	68.6	0.123	0.455	2
06127	Beryllium	7440-41-7	0.600	0.0182	0.114	2
06128	Cadmium	7440-43-9	0.0663 J	0.0455	0.114	2
06131	Chromium	7440-47-3	19.2	0.136	0.455	2
06132	Cobalt	7440-48-4	4.32	0.0227	0.114	2
06133	Copper	7440-50-8	9.32	0.0751	0.455	2
06135	Lead	7439-92-1	5.81	0.0118	0.227	2
06138	Molybdenum	7439-98-7	0.483	0.0569	0.114	2
06139	Nickel	7440-02-0	11.0	0.114	0.455	2
06141	Selenium	7782-49-2	0.0455 U	0.0455	0.455	2
06142	Silver	7440-22-4	0.106 J	0.0136	0.114	2
06145	Thallium	7440-28-0	0.222	0.0341	0.114	2
06148	Vanadium	7440-62-2	35.4	0.0250	0.114	2
06149	Zinc	7440-66-6	46.2	0.637	3.41	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0056 J	0.0033	0.115	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4	0.93	1.2	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.8	1
SW-846 7199						
			mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-7.5-8.5

LLI Sample # SW 6183548
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3047 SDG#: DE060-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
05892	3a Cr VI by EPA 7199	18540-29-9	mg/kg 0.60 J	mg/kg 0.23	mg/kg 1.2	1
ASTM D1498						
01821	32a OR Potential	n.a.	mV 425	mV 10.0	mV 10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	Std. Units 7.86	Std. Units 0.0100	Std. Units 0.0100	1
Wet Chemistry						
11624	28a Moisture Content by 160.3	n.a.	% 13.8	% 0.50	% 0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 11:07	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 12:14	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 17:56	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:22	John P Hook	1
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:22	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-7.5-8.5

LLI Sample # SW 6183548
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:48

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S3047 SDG#: DE060-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:29	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:29	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:29	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:02	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 10:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201A	01/24/2011 20:37	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 16:09	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201A	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102A	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402A	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401A	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0744 SDG#: DE060-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.5 U	6.5	7.7	0.83
06192	Benzene	71-43-2	0.1 U	0.1	3.9	0.83
06192	Bromobenzene	108-86-1	0.13 U	0.13	3.9	0.83
06192	Bromochloromethane	74-97-5	0.32 U	0.32	3.9	0.83
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	3.9	0.83
06192	Bromoform	75-25-2	0.39 U	0.39	3.9	0.83
06192	Bromomethane	74-83-9	0.24 U	0.24	3.9	0.83
06192	2-Butanone	78-93-3	1.2 U	1.2	7.7	0.83
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	3.9	0.83
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	3.9	0.83
06192	tert-Butylbenzene	98-06-6	0.15 U	0.15	3.9	0.83
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	3.9	0.83
06192	Chlorobenzene	108-90-7	0.11 U	0.11	3.9	0.83
06192	Chloroethane	75-00-3	0.13 U	0.13	3.9	0.83
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.29 U	0.29	3.9	0.83
06192	Chloroform	67-66-3	0.12 U	0.12	3.9	0.83
06192	Chloromethane	74-87-3	0.32 U	0.32	3.9	0.83
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	3.9	0.83
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	3.9	0.83
06192	Chlorotrifluoroethene	79-38-9	0.48 U	0.48	4.8	0.83
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.68 U	0.68	3.9	0.83
06192	Dibromochloromethane	124-48-1	0.19 U	0.19	3.9	0.83
06192	1,2-Dibromoethane	106-93-4	0.16 U	0.16	3.9	0.83
06192	Dibromomethane	74-95-3	0.23 U	0.23	3.9	0.83
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	3.9	0.83
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	3.9	0.83
06192	1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	3.9	0.83
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	3.9	0.83
06192	1,1-Dichloroethane	75-34-3	0.1 U	0.1	3.9	0.83
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	3.9	0.83
06192	1,1-Dichloroethene	75-35-4	0.38 U	0.38	3.9	0.83
06192	cis-1,2-Dichloroethene	156-59-2	0.18 U	0.18	3.9	0.83
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	3.9	0.83
06192	1,2-Dichloropropane	78-87-5	0.16 U	0.16	3.9	0.83
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	3.9	0.83
06192	2,2-Dichloropropane	594-20-7	0.16 U	0.16	3.9	0.83
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	3.9	0.83
06192	cis-1,3-Dichloropropene	10061-01-5	0.15 U	0.15	3.9	0.83
06192	trans-1,3-Dichloropropene	10061-02-6	0.16 U	0.16	3.9	0.83
06192	Ethylbenzene	100-41-4	0.06 U	0.06	3.9	0.83
06192	Freon 113	76-13-1	0.11 U	0.11	3.9	0.83
06192	Freon 133a	75-88-7	0.48 U	0.48	4.8	0.83
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	3.9	0.83
06192	2-Hexanone	591-78-6	1.5 U	1.5	7.7	0.83
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	3.9	0.83
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	3.9	0.83
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20 U	0.20	3.9	0.83
06192	4-Methyl-2-pentanone	108-10-1	0.38 U	0.38	7.7	0.83
06192	Methylene Chloride	75-09-2	0.63 J	0.23	3.9	0.83
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	3.9	0.83

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0744 SDG#: DE060-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.1 U	0.1	3.9	0.83
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	3.9	0.83
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22 U	0.22	3.9	0.83
06192	Tetrachloroethene	127-18-4	0.19 U	0.19	3.9	0.83
06192	Toluene	108-88-3	0.08 J	0.08	3.9	0.83
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	3.9	0.83
06192	1,2,4-Trichlorobenzene	120-82-1	0.17 U	0.17	3.9	0.83
06192	1,1,1-Trichloroethane	71-55-6	0.19 U	0.19	3.9	0.83
06192	1,1,2-Trichloroethane	79-00-5	0.26 U	0.26	3.9	0.83
06192	Trichloroethene	79-01-6	0.15 U	0.15	3.9	0.83
06192	Trichlorofluoromethane	75-69-4	0.28 U	0.28	3.9	0.83
06192	1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	3.9	0.83
06192	1,2,4-Trimethylbenzene	95-63-6	0.39 U	0.39	3.9	0.83
06192	1,3,5-Trimethylbenzene	108-67-8	0.1 U	0.1	3.9	0.83
06192	Vinyl Chloride	75-01-4	0.19 U	0.19	3.9	0.83
06192	m+p-Xylene	179601-23-1	0.16 U	0.16	3.9	0.83
06192	o-Xylene	95-47-6	0.16 U	0.16	3.9	0.83
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.9 U	4.9	15	20.97
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190 U	190	580	1
04688	Benzidine	92-87-5	1,400 U	1,400	3,900	1
04688	Benzoic acid	65-85-0	190 U	190	580	1
04688	Benzyl alcohol	100-51-6	190 U	190	580	1
04688	4-Bromophenyl-phenylether	101-55-3	19 U	19	190	1
04688	Carbazole	86-74-8	19 U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	39 U	39	190	1
04688	4-Chloroaniline	106-47-8	77 U	77	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19 U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19 U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19 U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19 U	19	190	1
04688	2-Chlorophenol	95-57-8	19 U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	39 U	39	190	1
04688	Dibenzofuran	132-64-9	19 U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19 U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19 U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19 U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	120 U	120	390	1
04688	2,4-Dichlorophenol	120-83-2	19 U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	39 U	39	190	1
04688	3,5-Dimethylphenol	108-68-9	39 U	39	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190 U	190	580	1
04688	2,4-Dinitrophenol	51-28-5	770 U	770	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	39 U	39	190	1
04688	2,6-Dinitrotoluene	606-20-2	19 U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19 U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0744 SDG#: DE060-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	27	J 19	390	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	39	U 39	190	1
04688	4-Methylphenol	106-44-5	39	U 39	190	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	39	U 39	190	1
04688	4-Nitroaniline	100-01-6	77	U 77	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	580	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	580	1
04688	Phenol	108-95-2	19	U 19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190	1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77	U 0.77	1.9	1
10138	Acenaphthylene	208-96-8	0.39	U 0.39	1.9	1
10138	Anthracene	120-12-7	0.39	U 0.39	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.77	U 0.77	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.77	U 0.77	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.77	U 0.77	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	U 0.77	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.77	U 0.77	1.9	1
10138	Butylbenzylphthalate	85-68-7	7.0	U 7.0	21	1
10138	Di-n-butylphthalate	84-74-2	7.0	U 7.0	21	1
10138	Chrysene	218-01-9	0.39	U 0.39	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U 0.77	1.9	1
10138	Diethylphthalate	84-66-2	7.0	U 7.0	21	1
10138	Dimethylphthalate	131-11-3	7.0	U 7.0	21	1
10138	Fluoranthene	206-44-0	0.77	U 0.77	1.9	1
10138	Fluorene	86-73-7	0.77	U 0.77	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	U 0.77	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.77	U 0.77	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0744 SDG#: DE060-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM						
10138	2-Methylnaphthalene	91-57-6	0.77 U	0.77	1.9	1
10138	Naphthalene	91-20-3	0.77 U	0.77	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.77 U	0.77	1.9	1
10138	Di-n-octylphthalate	117-84-0	8.9 J	7.0	21	1
10138	Phenanthrene	85-01-8	0.77 U	0.77	1.9	1
10138	Pyrene	129-00-0	0.77 U	0.77	1.9	1
Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.58 U	0.58	2.0	1
10225	PCB-1232	11141-16-5	0.60 U	0.60	2.0	1
10225	PCB-1242	53469-21-9	0.58 U	0.58	2.0	1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0	1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0	1
10225	PCB-1260	11096-82-5	0.38 U	0.38	2.0	1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0	1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	27,300	5.61	22.3	1
07914	Boron	7440-42-8	4.96 U	4.96	27.9	5
Reporting limits were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	3,950	6.84	22.3	1
01654	Iron	7439-89-6	35,400	26.3	112	5
01656	Lithium	7439-93-2	39.6	0.25	2.2	1
01657	Magnesium	7439-95-4	7,060	2.83	11.2	1
06958	Manganese	7439-96-5	452	0.0870	0.558	1
10145	Phosphorus	7723-14-0	288	0.625	11.2	1
01662	Potassium	7440-09-7	2,920	20.1	55.8	1
01667	Sodium	7440-23-5	272	41.6	112	1
07968	Strontium	7440-24-6	26.7	0.0692	0.558	1
06969	Tin	7440-31-5	3.00 J	1.12	11.2	1
06970	Titanium	7440-32-6	1,460	0.424	1.12	1
10146	Zirconium	7440-67-7	1.66 J	0.937	5.58	1
SW-846 6020						
06124	Antimony	7440-36-0	0.195 J	0.0669	0.223	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.39	0.0892	0.446	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0744 SDG#: DE060-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06126	Barium	7440-39-3	129	0.120	0.446	2
06127	Beryllium	7440-41-7	1.03	0.0178	0.112	2
06128	Cadmium	7440-43-9	0.182	0.0446	0.112	2
06131	Chromium	7440-47-3	31.6	0.134	0.446	2
06132	Cobalt	7440-48-4	12.4	0.0223	0.112	2
06133	Copper	7440-50-8	17.9	0.0736	0.446	2
06135	Lead	7439-92-1	12.9	0.0116	0.223	2
06138	Molybdenum	7439-98-7	0.580	0.0558	0.112	2
06139	Nickel	7440-02-0	19.0	0.112	0.446	2
06141	Selenium	7782-49-2	0.121 J	0.0446	0.446	2
06142	Silver	7440-22-4	0.0588 J	0.0134	0.112	2
06145	Thallium	7440-28-0	0.385	0.0335	0.112	2
06148	Vanadium	7440-62-2	57.2	0.0245	0.112	2
06149	Zinc	7440-66-6	74.1	0.625	3.35	2
SW-846 7471A						
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.112	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.2	0.93	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.43 J	0.23	1.2	1
	ASTM D1498		mV	mV	mV	
01821	32a OR Potential	n.a.	457	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.21	0.0100	0.0100	1
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	13.8	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0744 SDG#: DE060-04

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-074-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/17/2011 22:51	Laura M Krieger	0.83
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 17:00	Jason M Long	20.97
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 14:57	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 14:58	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 11:32	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 12:45	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 18:14	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:31	John P Hook	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
01654	Iron	SW-846 6010B	1	110195708001	01/21/2011 20:31	John P Hook	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:26	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:32	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0744 SDG#: DE060-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:32	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:32	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:03	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 11:15	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201A	01/24/2011 21:00	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 16:22	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201A	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102A	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402A	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401A	01/19/2011 19:05	Scott W Freisher	1

Sample Description: SL-074-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-7.0-8.0

LLI Sample # SW 6183550
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0747 SDG#: DE060-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U 200	590	1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900	1
04688	Benzoic acid	65-85-0	200	U 200	590	1
04688	Benzyl alcohol	100-51-6	200	U 200	590	1
04688	4-Bromophenyl-phenylether	101-55-3	20	U 20	200	1
04688	Carbazole	86-74-8	20	U 20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	200	1
04688	4-Chloroaniline	106-47-8	79	U 79	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U 20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U 20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U 20	200	1
04688	2-Chloronaphthalene	91-58-7	20	U 20	200	1
04688	2-Chlorophenol	95-57-8	20	U 20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	200	1
04688	Dibenzofuran	132-64-9	20	U 20	200	1
04688	1,2-Dichlorobenzene	95-50-1	20	U 20	200	1
04688	1,3-Dichlorobenzene	541-73-1	20	U 20	200	1
04688	1,4-Dichlorobenzene	106-46-7	20	U 20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390	1
04688	2,4-Dichlorophenol	120-83-2	20	U 20	200	1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	200	1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U 200	590	1
04688	2,4-Dinitrophenol	51-28-5	790	U 790	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	200	1
04688	2,6-Dinitrotoluene	606-20-2	20	U 20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	20	U 20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	21	J 20	390	1
04688	Hexachlorobenzene	118-74-1	20	U 20	200	1
04688	Hexachlorobutadiene	87-68-3	79	U 79	200	1
04688	Hexachlorocyclopentadiene	77-47-4	200	U 200	590	1
04688	Hexachloroethane	67-72-1	20	U 20	200	1
04688	Isophorone	78-59-1	20	U 20	200	1
04688	2-Methylphenol	95-48-7	39	U 39	200	1
04688	4-Methylphenol	106-44-5	39	U 39	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	20	U 20	200	1
04688	3-Nitroaniline	99-09-2	39	U 39	200	1
04688	4-Nitroaniline	100-01-6	79	U 79	200	1
04688	Nitrobenzene	98-95-3	20	U 20	200	1
04688	2-Nitrophenol	88-75-5	20	U 20	200	1
04688	4-Nitrophenol	100-02-7	200	U 200	590	1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U 20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	20	U 20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	200	U 200	590	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-7.0-8.0

LLI Sample # SW 6183550
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0747 SDG#: DE060-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	20 U	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	20 U	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	39 U	39	200	1
04688	2,4,6-Trichlorophenol	88-06-2	39 U	39	200	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.79 U	0.79	2.0	1
10138	Acenaphthylene	208-96-8	0.39 U	0.39	2.0	1
10138	Anthracene	120-12-7	0.39 U	0.39	2.0	1
10138	Benzo(a)anthracene	56-55-3	0.79 U	0.79	2.0	1
10138	Benzo(a)pyrene	50-32-8	0.79 U	0.79	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	0.79 U	0.79	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	0.79 U	0.79	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	0.79 U	0.79	2.0	1
10138	Butylbenzylphthalate	85-68-7	7.1 U	7.1	21	1
10138	Di-n-butylphthalate	84-74-2	7.1 U	7.1	21	1
10138	Chrysene	218-01-9	0.39 U	0.39	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	0.79 U	0.79	2.0	1
10138	Diethylphthalate	84-66-2	7.1 U	7.1	21	1
10138	Dimethylphthalate	131-11-3	7.1 U	7.1	21	1
10138	Fluoranthene	206-44-0	0.79 U	0.79	2.0	1
10138	Fluorene	86-73-7	0.79 U	0.79	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.79 U	0.79	2.0	1
10138	1-Methylnaphthalene	90-12-0	0.79 U	0.79	2.0	1
10138	2-Methylnaphthalene	91-57-6	0.79 U	0.79	2.0	1
10138	Naphthalene	91-20-3	0.79 U	0.79	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	0.79 U	0.79	2.0	1
10138	Di-n-octylphthalate	117-84-0	8.8 J	7.1	21	1
10138	Phenanthrene	85-01-8	0.79 U	0.79	2.0	1
10138	Pyrene	129-00-0	0.79 U	0.79	2.0	1
Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.						
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.9	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.9	1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.9	1
10225	PCB-1016	12674-11-2	0.39 U	0.39	2.0	1
10225	PCB-1221	11104-28-2	0.59 U	0.59	2.0	1
10225	PCB-1232	11141-16-5	0.61 U	0.61	2.0	1
10225	PCB-1242	53469-21-9	0.59 U	0.59	2.0	1
10225	PCB-1248	12672-29-6	0.39 U	0.39	2.0	1
10225	PCB-1254	11097-69-1	0.39 U	0.39	2.0	1
10225	PCB-1260	11096-82-5	0.39 U	0.39	2.0	1
10225	PCB-1262	37324-23-5	0.39 U	0.39	2.0	1
10225	PCB-1268	11100-14-4	0.39 U	0.39	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-7.0-8.0

LLI Sample # SW 6183550
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0747 SDG#: DE060-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	28,700	5.70	22.7	1
07914	Boron	7440-42-8	5.05 U	5.05	28.3	5
Reporting limits were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	5,140	6.95	22.7	1
01654	Iron	7439-89-6	40,700	26.7	113	5
01656	Lithium	7439-93-2	63.9	0.25	2.3	1
01657	Magnesium	7439-95-4	7,900	2.88	11.3	1
06958	Manganese	7439-96-5	269	0.0884	0.567	1
10145	Phosphorus	7723-14-0	609	0.635	11.3	1
01662	Potassium	7440-09-7	2,630	20.4	56.7	1
01667	Sodium	7440-23-5	325	42.3	113	1
07968	Strontium	7440-24-6	29.2	0.0703	0.567	1
06969	Tin	7440-31-5	3.21 J	1.13	11.3	1
06970	Titanium	7440-32-6	1,620	0.431	1.13	1
10146	Zirconium	7440-67-7	2.53 J	0.952	5.67	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.442	0.0680	0.227	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	18.4	0.0907	0.454	2
06126	Barium	7440-39-3	122	0.122	0.454	2
06127	Beryllium	7440-41-7	1.09	0.0181	0.113	2
06128	Cadmium	7440-43-9	0.183	0.0454	0.113	2
06131	Chromium	7440-47-3	36.8	0.136	0.454	2
06132	Cobalt	7440-48-4	7.15	0.0227	0.113	2
06133	Copper	7440-50-8	26.1	0.0748	0.454	2
06135	Lead	7439-92-1	15.0	0.0118	0.227	2
06138	Molybdenum	7439-98-7	0.808	0.0567	0.113	2
06139	Nickel	7440-02-0	20.8	0.113	0.454	2
06141	Selenium	7782-49-2	0.135 J	0.0454	0.454	2
06142	Silver	7440-22-4	0.167	0.0136	0.113	2
06145	Thallium	7440-28-0	0.359	0.0340	0.113	2
06148	Vanadium	7440-62-2	63.0	0.0249	0.113	2
06149	Zinc	7440-66-6	92.5	0.635	3.40	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0218 J	0.0032	0.112	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	7.5	0.94	1.2	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.6 U	10.6	35.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-7.0-8.0

LLI Sample # SW 6183550
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0747 SDG#: DE060-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
05892	3a Cr VI by EPA 7199	18540-29-9	0.54 J	0.24	1.2	1
ASTM D1498						
01821	32a OR Potential	n.a.	348	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	6.81	0.0100	0.0100	1
Wet Chemistry						
11624	28a Moisture Content by 160.3	n.a.	15.2	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 11:58	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 13:17	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 18:33	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:38	John P Hook	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
01654	Iron	SW-846 6010B	1	110195708001	01/21/2011 20:38	John P Hook	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:34	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-7.0-8.0

LLI Sample # SW 6183550
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:16

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S0747 SDG#: DE060-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:35	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:35	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:35	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:04	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 11:51	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/24/2011 21:23	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 16:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1214 SDG#: DE060-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.5 U	6.5	7.8	0.9
06192	Benzene	71-43-2	0.1 U	0.1	3.9	0.9
06192	Bromobenzene	108-86-1	0.13 U	0.13	3.9	0.9
06192	Bromochloromethane	74-97-5	0.32 U	0.32	3.9	0.9
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	3.9	0.9
06192	Bromoform	75-25-2	0.39 U	0.39	3.9	0.9
06192	Bromomethane	74-83-9	0.24 U	0.24	3.9	0.9
06192	2-Butanone	78-93-3	1.2 U	1.2	7.8	0.9
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	3.9	0.9
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	3.9	0.9
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	3.9	0.9
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	3.9	0.9
06192	Chlorobenzene	108-90-7	0.11 U	0.11	3.9	0.9
06192	Chloroethane	75-00-3	0.13 U	0.13	3.9	0.9
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.29 U	0.29	3.9	0.9
06192	Chloroform	67-66-3	0.12 U	0.12	3.9	0.9
06192	Chloromethane	74-87-3	0.32 U	0.32	3.9	0.9
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	3.9	0.9
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	3.9	0.9
06192	Chlorotrifluoroethene	79-38-9	0.49 U	0.49	4.9	0.9
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.68 U	0.68	3.9	0.9
06192	Dibromochloromethane	124-48-1	0.20 U	0.20	3.9	0.9
06192	1,2-Dibromoethane	106-93-4	0.17 U	0.17	3.9	0.9
06192	Dibromomethane	74-95-3	0.23 U	0.23	3.9	0.9
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	3.9	0.9
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	3.9	0.9
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	3.9	0.9
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	3.9	0.9
06192	1,1-Dichloroethane	75-34-3	0.1 U	0.1	3.9	0.9
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	3.9	0.9
06192	1,1-Dichloroethene	75-35-4	0.38 U	0.38	3.9	0.9
06192	cis-1,2-Dichloroethene	156-59-2	0.18 U	0.18	3.9	0.9
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	3.9	0.9
06192	1,2-Dichloropropane	78-87-5	0.17 U	0.17	3.9	0.9
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	3.9	0.9
06192	2,2-Dichloropropane	594-20-7	0.17 U	0.17	3.9	0.9
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	3.9	0.9
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	3.9	0.9
06192	trans-1,3-Dichloropropene	10061-02-6	0.17 U	0.17	3.9	0.9
06192	Ethylbenzene	100-41-4	0.06 U	0.06	3.9	0.9
06192	Freon 113	76-13-1	0.11 U	0.11	3.9	0.9
06192	Freon 133a	75-88-7	0.49 U	0.49	4.9	0.9
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	3.9	0.9
06192	2-Hexanone	591-78-6	1.6 U	1.6	7.8	0.9
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	3.9	0.9
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	3.9	0.9
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21 U	0.21	3.9	0.9
06192	4-Methyl-2-pentanone	108-10-1	0.38 U	0.38	7.8	0.9
06192	Methylene Chloride	75-09-2	0.77 J	0.23	3.9	0.9
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	3.9	0.9

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1214 SDG#: DE060-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.1 U	0.1	3.9	0.9
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	3.9	0.9
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22 U	0.22	3.9	0.9
06192	Tetrachloroethene	127-18-4	0.20 U	0.20	3.9	0.9
06192	Toluene	108-88-3	0.12 J	0.08	3.9	0.9
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	3.9	0.9
06192	1,2,4-Trichlorobenzene	120-82-1	0.18 U	0.18	3.9	0.9
06192	1,1,1-Trichloroethane	71-55-6	0.20 U	0.20	3.9	0.9
06192	1,1,2-Trichloroethane	79-00-5	0.26 U	0.26	3.9	0.9
06192	Trichloroethene	79-01-6	0.15 U	0.15	3.9	0.9
06192	Trichlorofluoromethane	75-69-4	0.28 U	0.28	3.9	0.9
06192	1,2,3-Trichloropropane	96-18-4	0.32 U	0.32	3.9	0.9
06192	1,2,4-Trimethylbenzene	95-63-6	0.39 U	0.39	3.9	0.9
06192	1,3,5-Trimethylbenzene	108-67-8	0.1 U	0.1	3.9	0.9
06192	Vinyl Chloride	75-01-4	0.20 U	0.20	3.9	0.9
06192	m+p-Xylene	179601-23-1	0.17 U	0.17	3.9	0.9
06192	o-Xylene	95-47-6	0.17 U	0.17	3.9	0.9
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.0 U	5.0	15	23.15
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180 U	180	540	1
04688	Benzidine	92-87-5	1,300 U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180 U	180	540	1
04688	Benzyl alcohol	100-51-6	180 U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18 U	18	180	1
04688	Carbazole	86-74-8	18 U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36 U	36	180	1
04688	4-Chloroaniline	106-47-8	72 U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18 U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18 U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18 U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18 U	18	180	1
04688	2-Chlorophenol	95-57-8	18 U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36 U	36	180	1
04688	Dibenzofuran	132-64-9	18 U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18 U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18 U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18 U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110 U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18 U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36 U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36 U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180 U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720 U	720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36 U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18 U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18 U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1214 SDG#: DE060-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	20	J 18	360	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U 72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	36	U 36	180	1
04688	4-Methylphenol	106-44-5	36	U 36	180	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	36	U 36	180	1
04688	4-Nitroaniline	100-01-6	72	U 72	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540	1
04688	Phenol	108-95-2	18	U 18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U 0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8	1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.72	U 0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.72	U 0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U 0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U 0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.72	U 0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	19	1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	19	1
10138	Chrysene	218-01-9	0.36	U 0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U 0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U 6.5	19	1
10138	Dimethylphthalate	131-11-3	6.5	U 6.5	19	1
10138	Fluoranthene	206-44-0	0.72	U 0.72	1.8	1
10138	Fluorene	86-73-7	0.72	U 0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U 0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72	U 0.72	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1214 SDG#: DE060-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	8.0 J	6.5	19	1
10138	Phenanthrene	85-01-8	0.72 U	0.72	1.8	1
10138	Pyrene	129-00-0	0.72 U	0.72	1.8	1

Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.

Pesticides/PCBs	SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.8
10225	PCB-1221	11104-28-2	0.54 U	0.54	1.8
10225	PCB-1232	11141-16-5	0.56 U	0.56	1.8
10225	PCB-1242	53469-21-9	0.54 U	0.54	1.8
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.8
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.8
10225	PCB-1260	11096-82-5	0.36 U	0.36	1.8
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.8
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.8

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,000	5.38	21.4
07914	Boron	7440-42-8	0.953 U	0.953	5.35
01650	Calcium	7440-70-2	3,140	6.56	21.4
01654	Iron	7439-89-6	16,700	5.04	21.4
01656	Lithium	7439-93-2	19.7	0.24	2.1
01657	Magnesium	7439-95-4	3,700	2.72	10.7
06958	Manganese	7439-96-5	530	0.0835	0.535
10145	Phosphorus	7723-14-0	429	0.599	10.7
01662	Potassium	7440-09-7	2,130	19.3	53.5
01667	Sodium	7440-23-5	68.0 J	39.9	107
07968	Strontium	7440-24-6	11.0	0.0664	0.535
06969	Tin	7440-31-5	2.15 J	1.07	10.7
06970	Titanium	7440-32-6	1,010	0.407	1.07
10146	Zirconium	7440-67-7	1.92 J	0.899	5.35

	SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0839 J	0.0642	0.214
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	6.92	0.0856	0.428
06126	Barium	7440-39-3	76.1	0.116	0.428

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1214 SDG#: DE060-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06127	Beryllium	7440-41-7	0.436	0.0171	0.107	2
06128	Cadmium	7440-43-9	0.0657 J	0.0428	0.107	2
06131	Chromium	7440-47-3	16.2	0.128	0.428	2
06132	Cobalt	7440-48-4	4.94	0.0214	0.107	2
06133	Copper	7440-50-8	9.18	0.0706	0.428	2
06135	Lead	7439-92-1	4.24	0.0111	0.214	2
06138	Molybdenum	7439-98-7	0.206	0.0535	0.107	2
06139	Nickel	7440-02-0	12.0	0.107	0.428	2
06141	Selenium	7782-49-2	0.117 J	0.0428	0.428	2
06142	Silver	7440-22-4	0.0157 J	0.0128	0.107	2
06145	Thallium	7440-28-0	0.210	0.0321	0.107	2
06148	Vanadium	7440-62-2	26.4	0.0235	0.107	2
06149	Zinc	7440-66-6	48.6	0.599	3.21	2
SW-846 7471A						
	mg/kg		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0077 J	0.0030	0.105	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	0.86	1.1	1
EPA 314.0						
	ug/kg		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7 U	9.7	32.4	1
SW-846 7199						
	mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1	1
ASTM D1498						
	mV		mV	mV	mV	
01821	32a OR Potential	n.a.	349	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
	Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.04	0.0100	0.0100	1
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	7.5	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

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14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1214 SDG#: DE060-06

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-121-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/17/2011 23:36	Laura M Krieger	0.9
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 17:20	Jason M Long	23.15
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:01	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 15:01	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 12:23	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 13:49	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 18:51	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:42	John P Hook	1
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:42	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:38	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1214 SDG#: DE060-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:38	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:38	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:05	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 12:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/24/2011 22:56	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11025243202A	01/29/2011 16:40	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183552
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1219 SDG#: DE060-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	220	U 220	650	1
04688	Benzidine	92-87-5	1,500	U 1,500	4,300	1
04688	Benzoic acid	65-85-0	220	U 220	650	1
04688	Benzyl alcohol	100-51-6	220	U 220	650	1
04688	4-Bromophenyl-phenylether	101-55-3	22	U 22	220	1
04688	Carbazole	86-74-8	22	U 22	220	1
04688	4-Chloro-3-methylphenol	59-50-7	43	U 43	220	1
04688	4-Chloroaniline	106-47-8	87	U 87	220	1
04688	bis(2-Chloroethoxy)methane	111-91-1	22	U 22	220	1
04688	bis(2-Chloroethyl)ether	111-44-4	22	U 22	220	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	22	U 22	220	1
04688	2-Chloronaphthalene	91-58-7	22	U 22	220	1
04688	2-Chlorophenol	95-57-8	22	U 22	220	1
04688	4-Chlorophenyl-phenylether	7005-72-3	43	U 43	220	1
04688	Dibenzofuran	132-64-9	22	U 22	220	1
04688	1,2-Dichlorobenzene	95-50-1	22	U 22	220	1
04688	1,3-Dichlorobenzene	541-73-1	22	U 22	220	1
04688	1,4-Dichlorobenzene	106-46-7	22	U 22	220	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U 130	430	1
04688	2,4-Dichlorophenol	120-83-2	22	U 22	220	1
04688	2,4-Dimethylphenol	105-67-9	43	U 43	220	1
04688	3,5-Dimethylphenol	108-68-9	43	U 43	220	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	220	U 220	650	1
04688	2,4-Dinitrophenol	51-28-5	870	U 870	2,600	1
04688	2,4-Dinitrotoluene	121-14-2	43	U 43	220	1
04688	2,6-Dinitrotoluene	606-20-2	22	U 22	220	1
04688	1,2-Diphenylhydrazine	122-66-7	22	U 22	220	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	22	J 22	430	1
04688	Hexachlorobenzene	118-74-1	22	U 22	220	1
04688	Hexachlorobutadiene	87-68-3	87	U 87	220	1
04688	Hexachlorocyclopentadiene	77-47-4	220	U 220	650	1
04688	Hexachloroethane	67-72-1	22	U 22	220	1
04688	Isophorone	78-59-1	22	U 22	220	1
04688	2-Methylphenol	95-48-7	43	U 43	220	1
04688	4-Methylphenol	106-44-5	43	U 43	220	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	22	U 22	220	1
04688	3-Nitroaniline	99-09-2	43	U 43	220	1
04688	4-Nitroaniline	100-01-6	87	U 87	220	1
04688	Nitrobenzene	98-95-3	22	U 22	220	1
04688	2-Nitrophenol	88-75-5	22	U 22	220	1
04688	4-Nitrophenol	100-02-7	220	U 220	650	1
04688	N-Nitroso-di-n-propylamine	621-64-7	22	U 22	220	1
04688	N-Nitrosodiphenylamine	86-30-6	22	U 22	220	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	220	U 220	650	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183552
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1219 SDG#: DE060-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	22 U	22	220	1
04688	1,2,4-Trichlorobenzene	120-82-1	22 U	22	220	1
04688	2,4,5-Trichlorophenol	95-95-4	43 U	43	220	1
04688	2,4,6-Trichlorophenol	88-06-2	43 U	43	220	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.87 U	0.87	2.2	1
10138	Acenaphthylene	208-96-8	0.43 U	0.43	2.2	1
10138	Anthracene	120-12-7	0.43 U	0.43	2.2	1
10138	Benzo(a)anthracene	56-55-3	0.87 U	0.87	2.2	1
10138	Benzo(a)pyrene	50-32-8	0.87 U	0.87	2.2	1
10138	Benzo(b)fluoranthene	205-99-2	0.87 U	0.87	2.2	1
10138	Benzo(g,h,i)perylene	191-24-2	0.87 U	0.87	2.2	1
10138	Benzo(k)fluoranthene	207-08-9	0.87 U	0.87	2.2	1
10138	Butylbenzylphthalate	85-68-7	7.8 U	7.8	23	1
10138	Di-n-butylphthalate	84-74-2	7.8 U	7.8	23	1
10138	Chrysene	218-01-9	0.43 U	0.43	2.2	1
10138	Dibenz(a,h)anthracene	53-70-3	0.87 U	0.87	2.2	1
10138	Diethylphthalate	84-66-2	7.8 U	7.8	23	1
10138	Dimethylphthalate	131-11-3	7.8 U	7.8	23	1
10138	Fluoranthene	206-44-0	0.87 U	0.87	2.2	1
10138	Fluorene	86-73-7	0.87 U	0.87	2.2	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.87 U	0.87	2.2	1
10138	1-Methylnaphthalene	90-12-0	0.87 U	0.87	2.2	1
10138	2-Methylnaphthalene	91-57-6	0.87 U	0.87	2.2	1
10138	Naphthalene	91-20-3	0.87 U	0.87	2.2	1
10138	N-Nitrosodimethylamine	62-75-9	0.87 U	0.87	2.2	1
10138	Di-n-octylphthalate	117-84-0	9.8 J	7.8	23	1
10138	Phenanthrene	85-01-8	0.87 U	0.87	2.2	1
10138	Pyrene	129-00-0	0.87 U	0.87	2.2	1
Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.						
Pesticides/PCBs	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.3 U	1.3	4.3	1
10225	Aroclor 5442	12642-23-8	1.3 U	1.3	4.3	1
10225	Aroclor 5460	11126-42-4	1.3 U	1.3	4.3	1
10225	PCB-1016	12674-11-2	0.43 U	0.43	2.2	1
10225	PCB-1221	11104-28-2	0.65 U	0.65	2.2	1
10225	PCB-1232	11141-16-5	0.68 U	0.68	2.2	1
10225	PCB-1242	53469-21-9	0.65 U	0.65	2.2	1
10225	PCB-1248	12672-29-6	0.43 U	0.43	2.2	1
10225	PCB-1254	11097-69-1	0.43 U	0.43	2.2	1
10225	PCB-1260	11096-82-5	0.43 U	0.43	2.2	1
10225	PCB-1262	37324-23-5	0.43 U	0.43	2.2	1
10225	PCB-1268	11100-14-4	0.43 U	0.43	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183552
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1219 SDG#: DE060-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	38,500	31.7	126	5
07914	Boron	7440-42-8	5.61 U	5.61	31.5	5
Reporting limits were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	12,200	7.73	25.2	1
01654	Iron	7439-89-6	61,000	29.7	126	5
01656	Lithium	7439-93-2	67.2	0.28	2.5	1
01657	Magnesium	7439-95-4	14,000	3.20	12.6	1
06958	Manganese	7439-96-5	640	0.0983	0.630	1
10145	Phosphorus	7723-14-0	2,020	3.53	63.0	5
01662	Potassium	7440-09-7	5,350	113	315	5
01667	Sodium	7440-23-5	522	47.0	126	1
07968	Strontium	7440-24-6	54.4	0.0782	0.630	1
06969	Tin	7440-31-5	3.08 J	1.26	12.6	1
06970	Titanium	7440-32-6	2,170	2.40	6.30	5
10146	Zirconium	7440-67-7	1.83 J	1.06	6.30	1
SW-846 6020						
			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.145 J	0.0779	0.260	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.19	0.104	0.519	2
06126	Barium	7440-39-3	399	0.351	1.30	5
06127	Beryllium	7440-41-7	1.66	0.0208	0.130	2
06128	Cadmium	7440-43-9	0.226	0.0519	0.130	2
06131	Chromium	7440-47-3	62.1	0.156	0.519	2
06132	Cobalt	7440-48-4	16.1	0.0260	0.130	2
06133	Copper	7440-50-8	35.3	0.0857	0.519	2
06135	Lead	7439-92-1	13.3	0.0135	0.260	2
06138	Molybdenum	7439-98-7	0.945	0.0649	0.130	2
06139	Nickel	7440-02-0	40.5	0.130	0.519	2
06141	Selenium	7782-49-2	0.0697 J	0.0519	0.519	2
06142	Silver	7440-22-4	0.179	0.0156	0.130	2
06145	Thallium	7440-28-0	0.576	0.0390	0.130	2
06148	Vanadium	7440-62-2	79.6	0.0286	0.130	2
06149	Zinc	7440-66-6	112	0.727	3.90	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0477 J	0.0036	0.126	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.6	1.0	1.3	1
EPA 314.0						
			ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.7 U	11.7	39.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183552
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1219 SDG#: DE060-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
05892	3a Cr VI by EPA 7199	18540-29-9	mg/kg 0.49 J	mg/kg 0.26	mg/kg 1.3	1
ASTM D1498						
01821	32a OR Potential	n.a.	mV 383	mV 10.0	mV 10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	Std. Units 7.60	Std. Units 0.0100	Std. Units 0.0100	1
Wet Chemistry						
11624	28a Moisture Content by 160.3	n.a.	% 23.0	% 0.50	% 0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 12:48	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 14:21	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 20:03	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:58	John P Hook	5
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:58	John P Hook	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
01654	Iron	SW-846 6010B	1	110195708001	01/21/2011 20:58	John P Hook	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:53	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:58	John P Hook	5
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:58	John P Hook	5
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183552
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

S1219 SDG#: DE060-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:58	John P Hook	5
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/23/2011 18:28	David K Beck	5
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:41	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:41	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:06	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 12:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/24/2011 23:19	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11025243202A	01/29/2011 17:55	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL120 SDG#: DE060-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.2 U	7.2	8.6	0.98
06192	Benzene	71-43-2	0.11 U	0.11	4.3	0.98
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.3	0.98
06192	Bromochloromethane	74-97-5	0.35 U	0.35	4.3	0.98
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.3	0.98
06192	Bromoform	75-25-2	0.43 U	0.43	4.3	0.98
06192	Bromomethane	74-83-9	0.27 U	0.27	4.3	0.98
06192	2-Butanone	78-93-3	1.3 U	1.3	8.6	0.98
06192	n-Butylbenzene	104-51-8	0.13 U	0.13	4.3	0.98
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.3	0.98
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.3	0.98
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.3	0.98
06192	Chlorobenzene	108-90-7	0.12 U	0.12	4.3	0.98
06192	Chloroethane	75-00-3	0.14 U	0.14	4.3	0.98
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.32 U	0.32	4.3	0.98
06192	Chloroform	67-66-3	0.13 U	0.13	4.3	0.98
06192	Chloromethane	74-87-3	0.35 U	0.35	4.3	0.98
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.3	0.98
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.3	0.98
06192	Chlorotrifluoroethene	79-38-9	0.54 U	0.54	5.4	0.98
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.75 U	0.75	4.3	0.98
06192	Dibromochloromethane	124-48-1	0.22 U	0.22	4.3	0.98
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.3	0.98
06192	Dibromomethane	74-95-3	0.26 U	0.26	4.3	0.98
06192	1,2-Dichlorobenzene	95-50-1	0.1 U	0.1	4.3	0.98
06192	1,3-Dichlorobenzene	541-73-1	0.13 U	0.13	4.3	0.98
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.3	0.98
06192	Dichlorodifluoromethane	75-71-8	0.13 U	0.13	4.3	0.98
06192	1,1-Dichloroethane	75-34-3	0.11 U	0.11	4.3	0.98
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.3	0.98
06192	1,1-Dichloroethene	75-35-4	0.42 U	0.42	4.3	0.98
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.3	0.98
06192	trans-1,2-Dichloroethene	156-60-5	0.13 U	0.13	4.3	0.98
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.3	0.98
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.3	0.98
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.3	0.98
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.3	0.98
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.3	0.98
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.3	0.98
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.3	0.98
06192	Freon 113	76-13-1	0.12 U	0.12	4.3	0.98
06192	Freon 133a	75-88-7	0.54 U	0.54	5.4	0.98
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.3	0.98
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.6	0.98
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.3	0.98
06192	p-Isopropyltoluene	99-87-6	0.12 U	0.12	4.3	0.98
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.23 U	0.23	4.3	0.98
06192	4-Methyl-2-pentanone	108-10-1	0.42 U	0.42	8.6	0.98
06192	Methylene Chloride	75-09-2	0.91 J	0.26	4.3	0.98
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.3	0.98

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL120 SDG#: DE060-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.11 U	0.11	4.3	0.98
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12 U	0.12	4.3	0.98
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.25 U	0.25	4.3	0.98
06192	Tetrachloroethene	127-18-4	0.22 U	0.22	4.3	0.98
06192	Toluene	108-88-3	0.1 J	0.09	4.3	0.98
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.3	0.98
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.3	0.98
06192	1,1,1-Trichloroethane	71-55-6	0.22 U	0.22	4.3	0.98
06192	1,1,2-Trichloroethane	79-00-5	0.29 U	0.29	4.3	0.98
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.3	0.98
06192	Trichlorofluoromethane	75-69-4	0.31 U	0.31	4.3	0.98
06192	1,2,3-Trichloropropane	96-18-4	0.35 U	0.35	4.3	0.98
06192	1,2,4-Trimethylbenzene	95-63-6	0.43 U	0.43	4.3	0.98
06192	1,3,5-Trimethylbenzene	108-67-8	0.11 U	0.11	4.3	0.98
06192	Vinyl Chloride	75-01-4	0.22 U	0.22	4.3	0.98
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.3	0.98
06192	o-Xylene	95-47-6	0.18 U	0.18	4.3	0.98
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.2 U	5.2	16	23.72
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180 U	180	550	1
04688	Benzidine	92-87-5	1,300 U	1,300	3,700	1
04688	Benzoic acid	65-85-0	180 U	180	550	1
04688	Benzyl alcohol	100-51-6	180 U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18 U	18	180	1
04688	Carbazole	86-74-8	18 U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37 U	37	180	1
04688	4-Chloroaniline	106-47-8	73 U	73	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18 U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18 U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18 U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18 U	18	180	1
04688	2-Chlorophenol	95-57-8	18 U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37 U	37	180	1
04688	Dibenzofuran	132-64-9	18 U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18 U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18 U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18 U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110 U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	18 U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	37 U	37	180	1
04688	3,5-Dimethylphenol	108-68-9	37 U	37	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180 U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	730 U	730	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37 U	37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18 U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18 U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.

Submitted: 01/14/2011 08:45

14420 Albemarle Point Place

Reported: 02/08/2011 13:21

Suite 210

Chantilly VA 20151

SL120 SDG#: DE060-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J 18	370	1
04688	Hexachlorobenzene	118-74-1	18	U 18	180	1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550	1
04688	Hexachloroethane	67-72-1	18	U 18	180	1
04688	Isophorone	78-59-1	18	U 18	180	1
04688	2-Methylphenol	95-48-7	37	U 37	180	1
04688	4-Methylphenol	106-44-5	37	U 37	180	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180	1
04688	3-Nitroaniline	99-09-2	37	U 37	180	1
04688	4-Nitroaniline	100-01-6	73	U 73	180	1
04688	Nitrobenzene	98-95-3	18	U 18	180	1
04688	2-Nitrophenol	88-75-5	18	U 18	180	1
04688	4-Nitrophenol	100-02-7	180	U 180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550	1
04688	Phenol	108-95-2	18	U 18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8	1
10138	Acenaphthylene	208-96-8	0.37	U 0.37	1.8	1
10138	Anthracene	120-12-7	0.37	U 0.37	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.73	U 0.73	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.73	U 0.73	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U 0.73	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U 0.73	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U 0.73	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.6	U 6.6	20	1
10138	Di-n-butylphthalate	84-74-2	6.6	U 6.6	20	1
10138	Chrysene	218-01-9	0.37	U 0.37	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U 0.73	1.8	1
10138	Diethylphthalate	84-66-2	6.6	U 6.6	20	1
10138	Dimethylphthalate	131-11-3	6.6	U 6.6	20	1
10138	Fluoranthene	206-44-0	0.73	U 0.73	1.8	1
10138	Fluorene	86-73-7	0.73	U 0.73	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U 0.73	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.73	U 0.73	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL120 SDG#: DE060-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8	1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8	1
10138	Di-n-octylphthalate	117-84-0	8.0 J	6.6	20	1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8	1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8	1

Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.

Pesticides/PCBs	SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9
10225	PCB-1221	11104-28-2	0.55 U	0.55	1.9
10225	PCB-1232	11141-16-5	0.57 U	0.57	1.9
10225	PCB-1242	53469-21-9	0.55 U	0.55	1.9
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9
10225	PCB-1260	11096-82-5	0.36 U	0.36	1.9
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	15,400	5.47	21.7
07914	Boron	7440-42-8	4.84 U	4.84	27.2
Reporting limits for boron were raised due to interference from the sample matrix.					
01650	Calcium	7440-70-2	4,880	6.66	21.7
01654	Iron	7439-89-6	28,500	5.12	21.7
01656	Lithium	7439-93-2	27.7	0.24	2.2
01657	Magnesium	7439-95-4	5,630	2.76	10.9
06958	Manganese	7439-96-5	336	0.0848	0.543
10145	Phosphorus	7723-14-0	480	0.609	10.9
01662	Potassium	7440-09-7	1,550	19.6	54.3
01667	Sodium	7440-23-5	106 J	40.5	109
07968	Strontium	7440-24-6	20.7	0.0674	0.543
06969	Tin	7440-31-5	2.59 J	1.09	10.9
06970	Titanium	7440-32-6	1,130	0.413	1.09
10146	Zirconium	7440-67-7	1.69 J	0.913	5.43

SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.141 J	0.0633
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.				
				0.211

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL120 SDG#: DE060-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06125	Arsenic	7440-38-2	8.15	0.0844	0.422	2
06126	Barium	7440-39-3	93.0	0.114	0.422	2
06127	Beryllium	7440-41-7	1.01	0.0169	0.106	2
06128	Cadmium	7440-43-9	0.0802 J	0.0422	0.106	2
06131	Chromium	7440-47-3	24.7	0.127	0.422	2
06132	Cobalt	7440-48-4	11.3	0.0211	0.106	2
06133	Copper	7440-50-8	16.9	0.0697	0.422	2
06135	Lead	7439-92-1	9.45	0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.414	0.0528	0.106	2
06139	Nickel	7440-02-0	15.3	0.106	0.422	2
06141	Selenium	7782-49-2	0.121 J	0.0422	0.422	2
06142	Silver	7440-22-4	0.0158 J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.280	0.0317	0.106	2
06148	Vanadium	7440-62-2	46.4	0.0232	0.106	2
06149	Zinc	7440-66-6	75.1	0.591	3.17	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0050 J	0.0030	0.106	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	0.88	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	32.9	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.86 J	0.22	1.1	1
	ASTM D1498		mV	mV	mV	
01821	32a OR Potential	n.a.	343	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.49	0.0100	0.0100	1
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL120 SDG#: DE060-08

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-120-SA5B-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/17/2011 23:58	Laura M Krieger	0.98
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 17:39	Jason M Long	23.72
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:04	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 15:04	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 13:13	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 14:53	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 20:21	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/24/2011 13:04	Eric L Eby	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 21:02	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:44	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL120 SDG#: DE060-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:44	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:44	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:07	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 12:28	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/24/2011 23:42	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 18:14	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL119 SDG#: DE060-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.7 U	7.7	9.2	1.02
06192	Benzene	71-43-2	0.11 U	0.11	4.6	1.02
06192	Bromobenzene	108-86-1	0.15 U	0.15	4.6	1.02
06192	Bromochloromethane	74-97-5	0.38 U	0.38	4.6	1.02
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.6	1.02
06192	Bromoform	75-25-2	0.46 U	0.46	4.6	1.02
06192	Bromomethane	74-83-9	0.29 U	0.29	4.6	1.02
06192	2-Butanone	78-93-3	1.4 U	1.4	9.2	1.02
06192	n-Butylbenzene	104-51-8	0.14 U	0.14	4.6	1.02
06192	sec-Butylbenzene	135-98-8	0.07 U	0.07	4.6	1.02
06192	tert-Butylbenzene	98-06-6	0.18 U	0.18	4.6	1.02
06192	Carbon Tetrachloride	56-23-5	0.16 U	0.16	4.6	1.02
06192	Chlorobenzene	108-90-7	0.13 U	0.13	4.6	1.02
06192	Chloroethane	75-00-3	0.15 U	0.15	4.6	1.02
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.35 U	0.35	4.6	1.02
06192	Chloroform	67-66-3	0.14 U	0.14	4.6	1.02
06192	Chloromethane	74-87-3	0.38 U	0.38	4.6	1.02
06192	2-Chlorotoluene	95-49-8	0.16 U	0.16	4.6	1.02
06192	4-Chlorotoluene	106-43-4	0.16 U	0.16	4.6	1.02
06192	Chlorotrifluoroethene	79-38-9	0.58 U	0.58	5.8	1.02
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.81 U	0.81	4.6	1.02
06192	Dibromochloromethane	124-48-1	0.23 U	0.23	4.6	1.02
06192	1,2-Dibromoethane	106-93-4	0.20 U	0.20	4.6	1.02
06192	Dibromomethane	74-95-3	0.28 U	0.28	4.6	1.02
06192	1,2-Dichlorobenzene	95-50-1	0.10 U	0.10	4.6	1.02
06192	1,3-Dichlorobenzene	541-73-1	0.14 U	0.14	4.6	1.02
06192	1,4-Dichlorobenzene	106-46-7	0.18 U	0.18	4.6	1.02
06192	Dichlorodifluoromethane	75-71-8	0.14 U	0.14	4.6	1.02
06192	1,1-Dichloroethane	75-34-3	0.11 U	0.11	4.6	1.02
06192	1,2-Dichloroethane	107-06-2	0.17 U	0.17	4.6	1.02
06192	1,1-Dichloroethene	75-35-4	0.45 U	0.45	4.6	1.02
06192	cis-1,2-Dichloroethene	156-59-2	0.22 U	0.22	4.6	1.02
06192	trans-1,2-Dichloroethene	156-60-5	0.14 U	0.14	4.6	1.02
06192	1,2-Dichloropropane	78-87-5	0.20 U	0.20	4.6	1.02
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.6	1.02
06192	2,2-Dichloropropane	594-20-7	0.20 U	0.20	4.6	1.02
06192	1,1-Dichloropropene	563-58-6	0.15 U	0.15	4.6	1.02
06192	cis-1,3-Dichloropropene	10061-01-5	0.18 U	0.18	4.6	1.02
06192	trans-1,3-Dichloropropene	10061-02-6	0.20 U	0.20	4.6	1.02
06192	Ethylbenzene	100-41-4	0.07 U	0.07	4.6	1.02
06192	Freon 113	76-13-1	0.13 U	0.13	4.6	1.02
06192	Freon 133a	75-88-7	0.58 U	0.58	5.8	1.02
06192	Hexachlorobutadiene	87-68-3	0.16 U	0.16	4.6	1.02
06192	2-Hexanone	591-78-6	1.8 U	1.8	9.2	1.02
06192	Isopropylbenzene	98-82-8	0.07 U	0.07	4.6	1.02
06192	p-Isopropyltoluene	99-87-6	0.13 U	0.13	4.6	1.02
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.24 U	0.24	4.6	1.02
06192	4-Methyl-2-pentanone	108-10-1	0.45 U	0.45	9.2	1.02
06192	Methylene Chloride	75-09-2	0.70 J	0.28	4.6	1.02
06192	n-Propylbenzene	103-65-1	0.08 U	0.08	4.6	1.02

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL119 SDG#: DE060-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.11 U	0.11	4.6	1.02
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.13 U	0.13	4.6	1.02
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.26 U	0.26	4.6	1.02
06192	Tetrachloroethene	127-18-4	0.23 U	0.23	4.6	1.02
06192	Toluene	108-88-3	0.1 J	0.09	4.6	1.02
06192	1,2,3-Trichlorobenzene	87-61-6	0.16 U	0.16	4.6	1.02
06192	1,2,4-Trichlorobenzene	120-82-1	0.21 U	0.21	4.6	1.02
06192	1,1,1-Trichloroethane	71-55-6	0.23 U	0.23	4.6	1.02
06192	1,1,2-Trichloroethane	79-00-5	0.31 U	0.31	4.6	1.02
06192	Trichloroethene	79-01-6	0.17 U	0.17	4.6	1.02
06192	Trichlorofluoromethane	75-69-4	0.33 U	0.33	4.6	1.02
06192	1,2,3-Trichloropropane	96-18-4	0.38 U	0.38	4.6	1.02
06192	1,2,4-Trimethylbenzene	95-63-6	0.46 U	0.46	4.6	1.02
06192	1,3,5-Trimethylbenzene	108-67-8	0.11 U	0.11	4.6	1.02
06192	Vinyl Chloride	75-01-4	0.23 U	0.23	4.6	1.02
06192	m+p-Xylene	179601-23-1	0.20 U	0.20	4.6	1.02
06192	o-Xylene	95-47-6	0.20 U	0.20	4.6	1.02
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.8 U	5.8	17	25.72
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190 U	190	560	1
04688	Benzidine	92-87-5	1,300 U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190 U	190	560	1
04688	Benzyl alcohol	100-51-6	190 U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19 U	19	190	1
04688	Carbazole	86-74-8	19 U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38 U	38	190	1
04688	4-Chloroaniline	106-47-8	75 U	75	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19 U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19 U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19 U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19 U	19	190	1
04688	2-Chlorophenol	95-57-8	19 U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38 U	38	190	1
04688	Dibenzofuran	132-64-9	19 U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19 U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19 U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19 U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110 U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19 U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38 U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38 U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190 U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	750 U	750	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38 U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19 U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19 U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL119 SDG#: DE060-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	32	J 19	380	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	38	U 38	190	1
04688	4-Methylphenol	106-44-5	38	U 38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	38	U 38	190	1
04688	4-Nitroaniline	100-01-6	75	U 75	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	190	U 190	560	1
04688	Phenol	108-95-2	19	U 19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190	1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.					
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U 0.75	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9	1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.75	U 0.75	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.75	U 0.75	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U 0.75	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U 0.75	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U 0.75	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8	U 6.8	20	1
10138	Di-n-butylphthalate	84-74-2	6.8	U 6.8	20	1
10138	Chrysene	218-01-9	0.38	U 0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U 0.75	1.9	1
10138	Diethylphthalate	84-66-2	6.8	U 6.8	20	1
10138	Dimethylphthalate	131-11-3	6.8	U 6.8	20	1
10138	Fluoranthene	206-44-0	0.75	U 0.75	1.9	1
10138	Fluorene	86-73-7	0.75	U 0.75	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U 0.75	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.75	U 0.75	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL119 SDG#: DE060-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	2-Methylnaphthalene	91-57-6	0.75 U	0.75	1.9	1
10138	Naphthalene	91-20-3	0.75 U	0.75	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.75 U	0.75	1.9	1
10138	Di-n-octylphthalate	117-84-0	8.3 J	6.8	20	1
10138	Phenanthrene	85-01-8	0.75 U	0.75	1.9	1
10138	Pyrene	129-00-0	0.75 U	0.75	1.9	1

Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.

Pesticides/PCBs	SW-846 8082	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9
10225	PCB-1221	11104-28-2	0.56 U	0.56	1.9
10225	PCB-1232	11141-16-5	0.59 U	0.59	1.9
10225	PCB-1242	53469-21-9	0.56 U	0.56	1.9
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9
10225	PCB-1260	11096-82-5	0.37 U	0.37	1.9
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,100	5.55	22.1
07914	Boron	7440-42-8	4.91 U	4.91	27.6
Reporting limits for boron were raised due to interference from the sample matrix.					
01650	Calcium	7440-70-2	3,340	6.77	22.1
01654	Iron	7439-89-6	28,900	5.20	22.1
01656	Lithium	7439-93-2	27.4	0.24	2.2
01657	Magnesium	7439-95-4	6,060	2.80	11.0
06958	Manganese	7439-96-5	259	0.0861	0.552
10145	Phosphorus	7723-14-0	243	0.618	11.0
01662	Potassium	7440-09-7	1,720	19.9	55.2
01667	Sodium	7440-23-5	138	41.2	110
07968	Strontium	7440-24-6	23.9	0.0685	0.552
06969	Tin	7440-31-5	2.82 J	1.10	11.0
06970	Titanium	7440-32-6	1,300	0.420	1.10
10146	Zirconium	7440-67-7	1.43 J	0.927	5.52

	SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.108 J	0.0676	0.225
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL119 SDG#: DE060-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06125	Arsenic	7440-38-2	5.10	0.0901	0.450	2
06126	Barium	7440-39-3	88.1	0.122	0.450	2
06127	Beryllium	7440-41-7	0.592	0.0180	0.113	2
06128	Cadmium	7440-43-9	0.0458 J	0.0450	0.113	2
06131	Chromium	7440-47-3	22.3	0.135	0.450	2
06132	Cobalt	7440-48-4	6.21	0.0225	0.113	2
06133	Copper	7440-50-8	7.92	0.0743	0.450	2
06135	Lead	7439-92-1	6.69	0.0117	0.225	2
06138	Molybdenum	7439-98-7	0.338	0.0563	0.113	2
06139	Nickel	7440-02-0	11.6	0.113	0.450	2
06141	Selenium	7782-49-2	0.0987 J	0.0450	0.450	2
06142	Silver	7440-22-4	0.0135 U	0.0135	0.113	2
06145	Thallium	7440-28-0	0.193	0.0338	0.113	2
06148	Vanadium	7440-62-2	41.2	0.0248	0.113	2
06149	Zinc	7440-66-6	48.7	0.631	3.38	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.110	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5	0.90	1.1	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.1	1
	ASTM D1498		mV	mV	mV	
01821	32a OR Potential	n.a.	358	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.01	0.0100	0.0100	1
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL119 SDG#: DE060-09

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-119-SA5B-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/18/2011 00:21	Laura M Krieger	1.02
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 17:59	Jason M Long	25.72
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:07	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 15:07	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 13:38	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 15:26	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 20:40	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/24/2011 13:07	Eric L Eby	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 21:06	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:48	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL119 SDG#: DE060-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:48	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:48	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:08	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 12:40	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/25/2011 00:05	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11025243202A	01/29/2011 18:20	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD009 SDG#: DE060-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	220	U 220	650	1
04688	Benzidine	92-87-5	1,500	U 1,500	4,400	1
04688	Benzoic acid	65-85-0	220	U 220	650	1
04688	Benzyl alcohol	100-51-6	220	U 220	650	1
04688	4-Bromophenyl-phenylether	101-55-3	22	U 22	220	1
04688	Carbazole	86-74-8	22	U 22	220	1
04688	4-Chloro-3-methylphenol	59-50-7	44	U 44	220	1
04688	4-Chloroaniline	106-47-8	87	U 87	220	1
04688	bis(2-Chloroethoxy)methane	111-91-1	22	U 22	220	1
04688	bis(2-Chloroethyl)ether	111-44-4	22	U 22	220	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	22	U 22	220	1
04688	2-Chloronaphthalene	91-58-7	22	U 22	220	1
04688	2-Chlorophenol	95-57-8	22	U 22	220	1
04688	4-Chlorophenyl-phenylether	7005-72-3	44	U 44	220	1
04688	Dibenzofuran	132-64-9	22	U 22	220	1
04688	1,2-Dichlorobenzene	95-50-1	22	U 22	220	1
04688	1,3-Dichlorobenzene	541-73-1	22	U 22	220	1
04688	1,4-Dichlorobenzene	106-46-7	22	U 22	220	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U 130	440	1
04688	2,4-Dichlorophenol	120-83-2	22	U 22	220	1
04688	2,4-Dimethylphenol	105-67-9	44	U 44	220	1
04688	3,5-Dimethylphenol	108-68-9	44	U 44	220	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	220	U 220	650	1
04688	2,4-Dinitrophenol	51-28-5	870	U 870	1,300	1
04688	2,4-Dinitrotoluene	121-14-2	44	U 44	220	1
04688	2,6-Dinitrotoluene	606-20-2	22	U 22	220	1
04688	1,2-Diphenylhydrazine	122-66-7	22	U 22	220	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	39	J 22	440	1
04688	Hexachlorobenzene	118-74-1	22	U 22	220	1
04688	Hexachlorobutadiene	87-68-3	87	U 87	220	1
04688	Hexachlorocyclopentadiene	77-47-4	220	U 220	650	1
04688	Hexachloroethane	67-72-1	22	U 22	220	1
04688	Isophorone	78-59-1	22	U 22	220	1
04688	2-Methylphenol	95-48-7	44	U 44	220	1
04688	4-Methylphenol	106-44-5	44	U 44	220	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	22	U 22	220	1
04688	3-Nitroaniline	99-09-2	44	U 44	220	1
04688	4-Nitroaniline	100-01-6	87	U 87	220	1
04688	Nitrobenzene	98-95-3	22	U 22	220	1
04688	2-Nitrophenol	88-75-5	22	U 22	220	1
04688	4-Nitrophenol	100-02-7	220	U 220	650	1
04688	N-Nitroso-di-n-propylamine	621-64-7	22	U 22	220	1
04688	N-Nitrosodiphenylamine	86-30-6	22	U 22	220	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	220	U 220	650	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD009 SDG#: DE060-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	22 U	22	220	1
04688	1,2,4-Trichlorobenzene	120-82-1	22 U	22	220	1
04688	2,4,5-Trichlorophenol	95-95-4	44 U	44	220	1
04688	2,4,6-Trichlorophenol	88-06-2	44 U	44	220	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.87 U	0.87	2.2	1
10138	Acenaphthylene	208-96-8	0.44 U	0.44	2.2	1
10138	Anthracene	120-12-7	0.44 U	0.44	2.2	1
10138	Benzo(a)anthracene	56-55-3	0.87 U	0.87	2.2	1
10138	Benzo(a)pyrene	50-32-8	4.5	0.87	2.2	1
10138	Benzo(b)fluoranthene	205-99-2	49	0.87	2.2	1
10138	Benzo(g,h,i)perylene	191-24-2	1.5 J	0.87	2.2	1
10138	Benzo(k)fluoranthene	207-08-9	0.87 U	0.87	2.2	1
10138	Butylbenzylphthalate	85-68-7	11 J	7.8	24	1
10138	Di-n-butylphthalate	84-74-2	7.8 U	7.8	24	1
10138	Chrysene	218-01-9	3.0	0.44	2.2	1
10138	Dibenz(a,h)anthracene	53-70-3	0.87 U	0.87	2.2	1
10138	Diethylphthalate	84-66-2	7.8 U	7.8	24	1
10138	Dimethylphthalate	131-11-3	7.8 U	7.8	24	1
10138	Fluoranthene	206-44-0	3.3	0.87	2.2	1
10138	Fluorene	86-73-7	5.8	0.87	2.2	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1 J	0.87	2.2	1
10138	1-Methylnaphthalene	90-12-0	0.87 U	0.87	2.2	1
10138	2-Methylnaphthalene	91-57-6	0.87 U	0.87	2.2	1
10138	Naphthalene	91-20-3	1.0 J	0.87	2.2	1
10138	N-Nitrosodimethylamine	62-75-9	0.87 U	0.87	2.2	1
10138	Di-n-octylphthalate	117-84-0	7.8 U	7.8	24	1
10138	Phenanthrene	85-01-8	1.4 J	0.87	2.2	1
10138	Pyrene	129-00-0	3.6	0.87	2.2	1

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

Herbicides		SW-846 8151A	ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	3.0	U	3.0	4.7	1
10401	Dalapon	75-99-0	5.8	U	5.8	12	1
10401	2,4-DB	94-82-6	3.5	U	3.5	3.5	1
10401	Dicamba	1918-00-9	0.52	U	0.52	1.6	1
10401	Dinoseb	88-85-7	1.0	U	1.0	3.1	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0	U	1.0	2.2	1
10401	MCPA	94-74-6	1,700	U	1,700	1,700	1
10401	MCPP (Mecoprop)	93-65-2	340	U	340	340	1
10401	2,4,5-T	93-76-5	0.11	U	0.11	0.22	1
10401	2,4,5-TP	93-72-1	0.098	U	0.098	0.22	1

MCPP was detected in the method blank at a concentration of 97.15 ug/kg. MCPP was also detected in the sample at a concentration

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD009 SDG#: DE060-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
of 298.34 ug/kg, however, the reporting limits are raised in the sample due to an interfering peak on the confirmation column. MCPP was not detected in the reextracted blank or sample. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for various compounds represent the lowest reporting limits attainable.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.086 U	0.086	0.22	1
01363	Alpha BHC	319-84-6	0.044 U	0.044	0.22	1
01363	Beta BHC	319-85-7	0.078 U	0.078	0.22	1
01363	Gamma BHC - Lindane	58-89-9	0.044 U	0.044	0.22	1
01363	Chlordane	57-74-9	3.0 U	3.0	4.4	1
01363	p,p-DDD	72-54-8	0.34 U	0.34	0.44	1
01363	p,p-DDE	72-55-9	1.5 U	1.5	1.5	1
01363	p,p-DDT	50-29-3	1.9 U	1.9	1.9	1
01363	Delta BHC	319-86-8	0.047 U	0.047	0.22	1
01363	Dieldrin	60-57-1	0.086 U	0.086	0.44	1
01363	Endosulfan I	959-98-8	0.058 U	0.058	0.22	1
01363	Endosulfan II	33213-65-9	0.34 U	0.34	0.44	1
01363	Endosulfan Sulfate	1031-07-8	0.086 U	0.086	0.44	1
01363	Endrin	72-20-8	0.086 U	0.086	0.44	1
01363	Endrin Aldehyde	7421-93-4	0.54 U	0.54	0.54	1
01363	Endrin Ketone	53494-70-5	0.38 U	0.38	0.44	1
01363	Heptachlor	76-44-8	0.26 U	0.26	0.26	1
01363	Heptachlor Epoxide	1024-57-3	0.044 U	0.044	0.22	1
01363	Methoxychlor	72-43-5	0.44 U	0.44	2.2	1
01363	Mirex	2385-85-5	0.086 U	0.086	0.44	1
01363	Toxaphene	8001-35-2	2.9 U	2.9	8.6	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.3 U	1.3	4.3	1
10225	Aroclor 5442	12642-23-8	1.3 U	1.3	4.3	1
10225	Aroclor 5460	11126-42-4	3.0 J	1.3	4.3	1
10225	PCB-1016	12674-11-2	0.43 U	0.43	2.2	1
10225	PCB-1221	11104-28-2	0.65 U	0.65	2.2	1
10225	PCB-1232	11141-16-5	0.68 U	0.68	2.2	1
10225	PCB-1242	53469-21-9	0.65 U	0.65	2.2	1
10225	PCB-1248	12672-29-6	0.43 U	0.43	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD009 SDG#: DE060-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8082						
10225	PCB-1254	11097-69-1	3.7	0.43	2.2	1
10225	PCB-1260	11096-82-5	3.3	0.43	2.2	1
10225	PCB-1262	37324-23-5	0.43 U	0.43	2.2	1
10225	PCB-1268	11100-14-4	0.43 U	0.43	2.2	1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B						
01643	Aluminum	7429-90-5	10,700	6.58	26.1	1
07914	Boron	7440-42-8	1.16 U	1.16	6.54	1
01650	Calcium	7440-70-2	8,140	8.01	26.1	1
01654	Iron	7439-89-6	19,800	6.16	26.1	1
01656	Lithium	7439-93-2	26.2	0.29	2.6	1
01657	Magnesium	7439-95-4	5,720	3.32	13.1	1
06958	Manganese	7439-96-5	306	0.102	0.654	1
10145	Phosphorus	7723-14-0	474	0.732	13.1	1
01662	Potassium	7440-09-7	3,270	23.5	65.4	1
01667	Sodium	7440-23-5	64.0 J	48.8	131	1
07968	Strontium	7440-24-6	22.9	0.0810	0.654	1
06969	Tin	7440-31-5	2.74 J	1.31	13.1	1
06970	Titanium	7440-32-6	997	0.497	1.31	1
10146	Zirconium	7440-67-7	1.10 U	1.10	6.54	1
SW-846 6020						
06124	Antimony	7440-36-0	0.118 J	0.0761	0.254	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	37.9	0.102	0.508	2
06126	Barium	7440-39-3	69.6	0.137	0.508	2
06127	Beryllium	7440-41-7	0.549	0.0203	0.127	2
06128	Cadmium	7440-43-9	0.211	0.0508	0.127	2
06131	Chromium	7440-47-3	19.1	0.152	0.508	2
06132	Cobalt	7440-48-4	6.53	0.0254	0.127	2
06133	Copper	7440-50-8	11.2	0.0838	0.508	2
06135	Lead	7439-92-1	12.8	0.0132	0.254	2
06138	Molybdenum	7439-98-7	0.435	0.0635	0.127	2
06139	Nickel	7440-02-0	14.7	0.127	0.508	2
06141	Selenium	7782-49-2	0.179 J	0.0508	0.508	2
06142	Silver	7440-22-4	0.0798 J	0.0152	0.127	2
06145	Thallium	7440-28-0	0.323	0.0381	0.127	2
06148	Vanadium	7440-62-2	32.4	0.0279	0.127	2
06149	Zinc	7440-66-6	57.9	0.711	3.81	2
SW-846 7471A						
00159	Mercury	7439-97-6	0.0220 J	0.0036	0.127	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD009 SDG#: DE060-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 300.0						
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8	1.0	1.3	1
EPA 314.0						
10147	7a Perchlorate EPA 314.0	14797-73-0	11.8 U	11.8	39.2	1
SW-846 7199						
05892	3a Cr VI by EPA 7199	18540-29-9	0.26 U	0.26	1.3	1
ASTM D1498						
01821	32a OR Potential	n.a.	391	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	7.15	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	23.5	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/27/2011 09:14	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 15:58	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110190027A	02/02/2011 11:27	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	110170031A	02/03/2011 07:41	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 20:58	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	110170031A	01/18/2011 08:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD009 SDG#: DE060-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110190027A	01/20/2011 08:45	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 21:10	John P Hook	1
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 21:10	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:51	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:51	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:51	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:10	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 12:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/25/2011 00:28	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11025243202A	01/29/2011 18:32	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD009 SDG#: DE060-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD028 SDG#: DE060-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	240	U 240	710	1
04688	Benzidine	92-87-5	1,700	U 1,700	4,700	1
04688	Benzoic acid	65-85-0	240	U 240	710	1
04688	Benzyl alcohol	100-51-6	240	U 240	710	1
04688	4-Bromophenyl-phenylether	101-55-3	24	U 24	240	1
04688	Carbazole	86-74-8	24	U 24	240	1
04688	4-Chloro-3-methylphenol	59-50-7	47	U 47	240	1
04688	4-Chloroaniline	106-47-8	94	U 94	240	1
04688	bis(2-Chloroethoxy)methane	111-91-1	24	U 24	240	1
04688	bis(2-Chloroethyl)ether	111-44-4	24	U 24	240	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	24	U 24	240	1
04688	2-Chloronaphthalene	91-58-7	24	U 24	240	1
04688	2-Chlorophenol	95-57-8	24	U 24	240	1
04688	4-Chlorophenyl-phenylether	7005-72-3	47	U 47	240	1
04688	Dibenzofuran	132-64-9	24	U 24	240	1
04688	1,2-Dichlorobenzene	95-50-1	24	U 24	240	1
04688	1,3-Dichlorobenzene	541-73-1	24	U 24	240	1
04688	1,4-Dichlorobenzene	106-46-7	24	U 24	240	1
04688	3,3'-Dichlorobenzidine	91-94-1	140	U 140	470	1
04688	2,4-Dichlorophenol	120-83-2	24	U 24	240	1
04688	2,4-Dimethylphenol	105-67-9	47	U 47	240	1
04688	3,5-Dimethylphenol	108-68-9	47	U 47	240	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	240	U 240	710	1
04688	2,4-Dinitrophenol	51-28-5	940	U 940	1,400	1
04688	2,4-Dinitrotoluene	121-14-2	47	U 47	240	1
04688	2,6-Dinitrotoluene	606-20-2	24	U 24	240	1
04688	1,2-Diphenylhydrazine	122-66-7	24	U 24	240	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	35	J 24	470	1
04688	Hexachlorobenzene	118-74-1	24	U 24	240	1
04688	Hexachlorobutadiene	87-68-3	94	U 94	240	1
04688	Hexachlorocyclopentadiene	77-47-4	240	U 240	710	1
04688	Hexachloroethane	67-72-1	24	U 24	240	1
04688	Isophorone	78-59-1	24	U 24	240	1
04688	2-Methylphenol	95-48-7	47	U 47	240	1
04688	4-Methylphenol	106-44-5	47	U 47	240	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	2-Nitroaniline	88-74-4	24	U 24	240	1
04688	3-Nitroaniline	99-09-2	47	U 47	240	1
04688	4-Nitroaniline	100-01-6	94	U 94	240	1
04688	Nitrobenzene	98-95-3	24	U 24	240	1
04688	2-Nitrophenol	88-75-5	24	U 24	240	1
04688	4-Nitrophenol	100-02-7	240	U 240	710	1
04688	N-Nitroso-di-n-propylamine	621-64-7	24	U 24	240	1
04688	N-Nitrosodiphenylamine	86-30-6	24	U 24	240	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Pentachlorophenol	87-86-5	240	U 240	710	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD028 SDG#: DE060-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Phenol	108-95-2	24 U	24	240	1
04688	1,2,4-Trichlorobenzene	120-82-1	24 U	24	240	1
04688	2,4,5-Trichlorophenol	95-95-4	47 U	47	240	1
04688	2,4,6-Trichlorophenol	88-06-2	47 U	47	240	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.94 U	0.94	2.4	1
10138	Acenaphthylene	208-96-8	0.47 U	0.47	2.4	1
10138	Anthracene	120-12-7	0.47 U	0.47	2.4	1
10138	Benzo(a)anthracene	56-55-3	0.94 U	0.94	2.4	1
10138	Benzo(a)pyrene	50-32-8	1.4 J	0.94	2.4	1
10138	Benzo(b)fluoranthene	205-99-2	25	0.94	2.4	1
10138	Benzo(g,h,i)perylene	191-24-2	0.94 U	0.94	2.4	1
10138	Benzo(k)fluoranthene	207-08-9	0.94 U	0.94	2.4	1
10138	Butylbenzylphthalate	85-68-7	8.5 U	8.5	25	1
10138	Di-n-butylphthalate	84-74-2	8.5 U	8.5	25	1
10138	Chrysene	218-01-9	0.93 J	0.47	2.4	1
10138	Dibenz(a,h)anthracene	53-70-3	0.94 U	0.94	2.4	1
10138	Diethylphthalate	84-66-2	8.5 U	8.5	25	1
10138	Dimethylphthalate	131-11-3	8.5 U	8.5	25	1
10138	Fluoranthene	206-44-0	1.3 J	0.94	2.4	1
10138	Fluorene	86-73-7	4.4	0.94	2.4	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.94 U	0.94	2.4	1
10138	1-Methylnaphthalene	90-12-0	0.94 U	0.94	2.4	1
10138	2-Methylnaphthalene	91-57-6	0.94 U	0.94	2.4	1
10138	Naphthalene	91-20-3	1.2 J	0.94	2.4	1
10138	N-Nitrosodimethylamine	62-75-9	0.94 U	0.94	2.4	1
10138	Di-n-octylphthalate	117-84-0	8.5 U	8.5	25	1
10138	Phenanthrene	85-01-8	1.2 J	0.94	2.4	1
10138	Pyrene	129-00-0	0.94 U	0.94	2.4	1

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.7 U	1.7	5.1
10401	Dalapon	75-99-0	6.2 U	6.2	13
10401	2,4-DB	94-82-6	3.8	0.88	2.4
10401	Dicamba	1918-00-9	0.57 U	0.57	1.7
10401	Dinoseb	88-85-7	1.1 U	1.1	3.4
10401	2,4-DP (Dichlorprop)	120-36-5	1.1 U	1.1	2.4
10401	MCPA	94-74-6	450 U	450	450
10401	MCPP (Mecoprop)	93-65-2	570 U	570	570
10401	2,4,5-T	93-76-5	0.12 U	0.12	0.24
10401	2,4,5-TP	93-72-1	0.11 U	0.11	0.24

MCPP was detected in the method blank at a concentration of 97.15 ug/kg. MCPP was also detected in the sample at a concentration

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD028 SDG#: DE060-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
of 488.92 ug/kg, however, the reporting limits are raised in the sample due to an interfering peak on the confirmation column. MCPP was not detected in the reextracted blank or sample. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPP and MCPA represent the lowest reporting limits attainable.						
Pesticides/PCBs SW-846 8081A						
01363	Aldrin	309-00-2	0.093 U	0.093	0.24	1
01363	Alpha BHC	319-84-6	0.048 U	0.048	0.24	1
01363	Beta BHC	319-85-7	0.085 U	0.085	0.24	1
01363	Gamma BHC - Lindane	58-89-9	0.048 U	0.048	0.24	1
01363	Chlordane	57-74-9	1.1 U	1.1	4.8	1
01363	p,p-DDD	72-54-8	0.12 U	0.12	0.48	1
01363	p,p-DDE	72-55-9	0.17 U	0.17	0.48	1
01363	p,p-DDT	50-29-3	0.31 U	0.31	0.48	1
01363	Delta BHC	319-86-8	0.051 U	0.051	0.24	1
01363	Dieldrin	60-57-1	0.093 U	0.093	0.48	1
01363	Endosulfan I	959-98-8	0.062 U	0.062	0.24	1
01363	Endosulfan II	33213-65-9	0.093 U	0.093	0.48	1
01363	Endosulfan Sulfate	1031-07-8	0.093 U	0.093	0.48	1
01363	Endrin	72-20-8	0.093 U	0.093	0.48	1
01363	Endrin Aldehyde	7421-93-4	0.093 U	0.093	0.48	1
01363	Endrin Ketone	53494-70-5	0.093 U	0.093	0.48	1
01363	Heptachlor	76-44-8	0.085 U	0.085	0.24	1
01363	Heptachlor Epoxide	1024-57-3	0.048 U	0.048	0.24	1
01363	Methoxychlor	72-43-5	0.64 U	0.64	2.4	1
01363	Mirex	2385-85-5	0.093 U	0.093	0.48	1
01363	Toxaphene	8001-35-2	3.1 U	3.1	9.3	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs SW-846 8082						
10225	Aroclor 5432	63496-31-1	1.4 U	1.4	4.7	1
10225	Aroclor 5442	12642-23-8	1.4 U	1.4	4.7	1
10225	Aroclor 5460	11126-42-4	1.4 U	1.4	4.7	1
10225	PCB-1016	12674-11-2	0.47 U	0.47	2.4	1
10225	PCB-1221	11104-28-2	0.71 U	0.71	2.4	1
10225	PCB-1232	11141-16-5	0.74 U	0.74	2.4	1
10225	PCB-1242	53469-21-9	0.71 U	0.71	2.4	1
10225	PCB-1248	12672-29-6	0.47 U	0.47	2.4	1
10225	PCB-1254	11097-69-1	1.5 J	0.47	2.4	1
10225	PCB-1260	11096-82-5	0.47 U	0.47	2.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD028 SDG#: DE060-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs						
	SW-846 8082		ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	0.47 U	0.47	2.4	1
10225	PCB-1268	11100-14-4	0.47 U	0.47	2.4	1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals						
	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	9,630	6.92	27.5	1
07914	Boron	7440-42-8	1.22 U	1.22	6.88	1
01650	Calcium	7440-70-2	3,900	8.43	27.5	1
01654	Iron	7439-89-6	18,800	6.48	27.5	1
01656	Lithium	7439-93-2	22.6	0.30	2.8	1
01657	Magnesium	7439-95-4	4,850	3.49	13.8	1
06958	Manganese	7439-96-5	246	0.107	0.688	1
10145	Phosphorus	7723-14-0	478	0.770	13.8	1
01662	Potassium	7440-09-7	2,750	24.8	68.8	1
01667	Sodium	7440-23-5	65.7 J	51.3	138	1
07968	Strontium	7440-24-6	12.0	0.0853	0.688	1
06969	Tin	7440-31-5	2.53 J	1.38	13.8	1
06970	Titanium	7440-32-6	1,070	0.523	1.38	1
10146	Zirconium	7440-67-7	2.10 J	1.16	6.88	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.0833 U	0.0833	0.278	2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	2.87	0.111	0.555	2
06126	Barium	7440-39-3	64.4	0.150	0.555	2
06127	Beryllium	7440-41-7	0.365	0.0222	0.139	2
06128	Cadmium	7440-43-9	0.208	0.0555	0.139	2
06131	Chromium	7440-47-3	15.9	0.167	0.555	2
06132	Cobalt	7440-48-4	5.06	0.0278	0.139	2
06133	Copper	7440-50-8	6.44	0.0917	0.555	2
06135	Lead	7439-92-1	6.77	0.0144	0.278	2
06138	Molybdenum	7439-98-7	0.291	0.0694	0.139	2
06139	Nickel	7440-02-0	9.52	0.139	0.555	2
06141	Selenium	7782-49-2	0.124 J	0.0555	0.555	2
06142	Silver	7440-22-4	0.0370 J	0.0167	0.139	2
06145	Thallium	7440-28-0	0.191	0.0417	0.139	2
06148	Vanadium	7440-62-2	32.6	0.0306	0.139	2
06149	Zinc	7440-66-6	52.6	0.778	4.17	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0904 J	0.0040	0.140	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD028 SDG#: DE060-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 300.0						
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0	1.1	1.4	1
EPA 314.0						
10147	7a Perchlorate EPA 314.0	14797-73-0	12.7 U	12.7	42.5	1
SW-846 7199						
05892	3a Cr VI by EPA 7199	18540-29-9	0.29 J	0.28	1.4	1
ASTM D1498						
01821	32a OR Potential	n.a.	409	10.0	10.0	1
The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
SW-846 9045C modified						
00394	22a pH by 9045C	n.a.	7.41	0.0100	0.0100	1
Wet Chemistry EPA 160.3 modified						
11624	28a Moisture Content by 160.3	n.a.	29.4	0.50	0.50	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/27/2011 09:40	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 16:30	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110190027A	02/02/2011 12:50	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	110170031A	02/03/2011 07:55	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 21:17	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	110170031A	01/18/2011 08:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD028 SDG#: DE060-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110190027A	01/20/2011 08:45	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 21:13	John P Hook	1
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 21:13	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 17:00	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 17:00	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 17:00	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:11	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203B	01/27/2011 13:05	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/25/2011 00:51	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 18:51	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203B	01/25/2011 23:40	Venia B McFadden	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SD028 SDG#: DE060-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL122 SDG#: DE060-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.9 U	7.9	9.4	1.01
06192	Benzene	71-43-2	0.12 U	0.12	4.7	1.01
06192	Bromobenzene	108-86-1	0.15 U	0.15	4.7	1.01
06192	Bromochloromethane	74-97-5	0.39 U	0.39	4.7	1.01
06192	Bromodichloromethane	75-27-4	0.09 U	0.09	4.7	1.01
06192	Bromoform	75-25-2	0.47 U	0.47	4.7	1.01
06192	Bromomethane	74-83-9	0.29 U	0.29	4.7	1.01
06192	2-Butanone	78-93-3	1.4 U	1.4	9.4	1.01
06192	n-Butylbenzene	104-51-8	0.14 U	0.14	4.7	1.01
06192	sec-Butylbenzene	135-98-8	0.07 U	0.07	4.7	1.01
06192	tert-Butylbenzene	98-06-6	0.19 U	0.19	4.7	1.01
06192	Carbon Tetrachloride	56-23-5	0.16 U	0.16	4.7	1.01
06192	Chlorobenzene	108-90-7	0.13 U	0.13	4.7	1.01
06192	Chloroethane	75-00-3	0.15 U	0.15	4.7	1.01
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.35 U	0.35	4.7	1.01
06192	Chloroform	67-66-3	0.14 U	0.14	4.7	1.01
06192	Chloromethane	74-87-3	0.39 U	0.39	4.7	1.01
06192	2-Chlorotoluene	95-49-8	0.16 U	0.16	4.7	1.01
06192	4-Chlorotoluene	106-43-4	0.16 U	0.16	4.7	1.01
06192	Chlorotrifluoroethene	79-38-9	0.59 U	0.59	5.9	1.01
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.82 U	0.82	4.7	1.01
06192	Dibromochloromethane	124-48-1	0.24 U	0.24	4.7	1.01
06192	1,2-Dibromoethane	106-93-4	0.20 U	0.20	4.7	1.01
06192	Dibromomethane	74-95-3	0.28 U	0.28	4.7	1.01
06192	1,2-Dichlorobenzene	95-50-1	0.11 U	0.11	4.7	1.01
06192	1,3-Dichlorobenzene	541-73-1	0.14 U	0.14	4.7	1.01
06192	1,4-Dichlorobenzene	106-46-7	0.19 U	0.19	4.7	1.01
06192	Dichlorodifluoromethane	75-71-8	0.14 U	0.14	4.7	1.01
06192	1,1-Dichloroethane	75-34-3	0.12 U	0.12	4.7	1.01
06192	1,2-Dichloroethane	107-06-2	0.18 U	0.18	4.7	1.01
06192	1,1-Dichloroethene	75-35-4	0.46 U	0.46	4.7	1.01
06192	cis-1,2-Dichloroethene	156-59-2	0.22 U	0.22	4.7	1.01
06192	trans-1,2-Dichloroethene	156-60-5	0.14 U	0.14	4.7	1.01
06192	1,2-Dichloropropane	78-87-5	0.20 U	0.20	4.7	1.01
06192	1,3-Dichloropropane	142-28-9	0.09 U	0.09	4.7	1.01
06192	2,2-Dichloropropane	594-20-7	0.20 U	0.20	4.7	1.01
06192	1,1-Dichloropropene	563-58-6	0.15 U	0.15	4.7	1.01
06192	cis-1,3-Dichloropropene	10061-01-5	0.19 U	0.19	4.7	1.01
06192	trans-1,3-Dichloropropene	10061-02-6	0.20 U	0.20	4.7	1.01
06192	Ethylbenzene	100-41-4	0.07 U	0.07	4.7	1.01
06192	Freon 113	76-13-1	0.13 U	0.13	4.7	1.01
06192	Freon 133a	75-88-7	0.59 U	0.59	5.9	1.01
06192	Hexachlorobutadiene	87-68-3	0.16 U	0.16	4.7	1.01
06192	2-Hexanone	591-78-6	1.9 U	1.9	9.4	1.01
06192	Isopropylbenzene	98-82-8	0.07 U	0.07	4.7	1.01
06192	p-Isopropyltoluene	99-87-6	0.13 U	0.13	4.7	1.01
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.25 U	0.25	4.7	1.01
06192	4-Methyl-2-pentanone	108-10-1	0.46 U	0.46	9.4	1.01
06192	Methylene Chloride	75-09-2	1.4 J	0.28	4.7	1.01
06192	n-Propylbenzene	103-65-1	0.08 U	0.08	4.7	1.01

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL122 SDG#: DE060-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.12 U	0.12	4.7	1.01
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.13 U	0.13	4.7	1.01
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.27 U	0.27	4.7	1.01
06192	Tetrachloroethene	127-18-4	0.24 U	0.24	4.7	1.01
06192	Toluene	108-88-3	0.09 U	0.09	4.7	1.01
06192	1,2,3-Trichlorobenzene	87-61-6	0.16 U	0.16	4.7	1.01
06192	1,2,4-Trichlorobenzene	120-82-1	0.21 U	0.21	4.7	1.01
06192	1,1,1-Trichloroethane	71-55-6	0.24 U	0.24	4.7	1.01
06192	1,1,2-Trichloroethane	79-00-5	0.32 U	0.32	4.7	1.01
06192	Trichloroethene	79-01-6	0.18 U	0.18	4.7	1.01
06192	Trichlorofluoromethane	75-69-4	0.34 U	0.34	4.7	1.01
06192	1,2,3-Trichloropropane	96-18-4	0.39 U	0.39	4.7	1.01
06192	1,2,4-Trimethylbenzene	95-63-6	0.47 U	0.47	4.7	1.01
06192	1,3,5-Trimethylbenzene	108-67-8	0.12 U	0.12	4.7	1.01
06192	Vinyl Chloride	75-01-4	0.24 U	0.24	4.7	1.01
06192	m+p-Xylene	179601-23-1	0.20 U	0.20	4.7	1.01
06192	o-Xylene	95-47-6	0.20 U	0.20	4.7	1.01
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.8 U	5.8	18	25.2
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190 U	190	580	1
04688	Benzidine	92-87-5	1,400 U	1,400	3,900	1
04688	Benzoic acid	65-85-0	190 U	190	580	1
04688	Benzyl alcohol	100-51-6	190 U	190	580	1
04688	4-Bromophenyl-phenylether	101-55-3	19 U	19	190	1
04688	Carbazole	86-74-8	19 U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	39 U	39	190	1
04688	4-Chloroaniline	106-47-8	77 U	77	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19 U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19 U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19 U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19 U	19	190	1
04688	2-Chlorophenol	95-57-8	19 U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	39 U	39	190	1
04688	Dibenzofuran	132-64-9	19 U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19 U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19 U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19 U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	120 U	120	390	1
04688	2,4-Dichlorophenol	120-83-2	19 U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	39 U	39	190	1
04688	3,5-Dimethylphenol	108-68-9	39 U	39	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190 U	190	580	1
04688	2,4-Dinitrophenol	51-28-5	770 U	770	1,200	1
04688	2,4-Dinitrotoluene	121-14-2	39 U	39	190	1
04688	2,6-Dinitrotoluene	606-20-2	19 U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19 U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

CDM Federal Programs Corp.

Submitted: 01/14/2011 08:45

14420 Albemarle Point Place

Reported: 02/08/2011 13:21

Suite 210

Chantilly VA 20151

SL122 SDG#: DE060-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	30	J 19	390	1
04688	Hexachlorobenzene	118-74-1	19	U 19	190	1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580	1
04688	Hexachloroethane	67-72-1	19	U 19	190	1
04688	Isophorone	78-59-1	19	U 19	190	1
04688	2-Methylphenol	95-48-7	39	U 39	190	1
04688	4-Methylphenol	106-44-5	39	U 39	190	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190	1
04688	3-Nitroaniline	99-09-2	39	U 39	190	1
04688	4-Nitroaniline	100-01-6	77	U 77	190	1
04688	Nitrobenzene	98-95-3	19	U 19	190	1
04688	2-Nitrophenol	88-75-5	19	U 19	190	1
04688	4-Nitrophenol	100-02-7	190	U 190	580	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	580	1
04688	Phenol	108-95-2	19	U 19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190	1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190	1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77	U 0.77	1.9	1
10138	Acenaphthylene	208-96-8	0.39	U 0.39	1.9	1
10138	Anthracene	120-12-7	0.39	U 0.39	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.77	U 0.77	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.77	U 0.77	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.77	U 0.77	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	U 0.77	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.77	U 0.77	1.9	1
10138	Butylbenzylphthalate	85-68-7	7.0	U 7.0	21	1
10138	Di-n-butylphthalate	84-74-2	7.0	U 7.0	21	1
10138	Chrysene	218-01-9	0.39	U 0.39	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U 0.77	1.9	1
10138	Diethylphthalate	84-66-2	7.0	U 7.0	21	1
10138	Dimethylphthalate	131-11-3	7.0	U 7.0	21	1
10138	Fluoranthene	206-44-0	0.77	U 0.77	1.9	1
10138	Fluorene	86-73-7	0.77	U 0.77	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	U 0.77	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.77	U 0.77	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

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SL122 SDG#: DE060-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	
10138	2-Methylnaphthalene	91-57-6	0.77 U	0.77	1.9	1
10138	Naphthalene	91-20-3	0.77 U	0.77	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.77 U	0.77	1.9	1
10138	Di-n-octylphthalate	117-84-0	7.0 U	7.0	21	1
10138	Phenanthrene	85-01-8	0.77 U	0.77	1.9	1
10138	Pyrene	129-00-0	0.77 U	0.77	1.9	1

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

Perchlorate	SW-846 6850 1/2007	ug/kg	ug/kg	ug/kg	
06557 6a Perchlorate EPA 6850	14797-73-0	2.4 U	2.4	5.8	1

Pesticides/PCBs	SW-846 8082	ug/kg	ug/kg	ug/kg	
10225 Aroclor 5432	63496-31-1	1.2 U	1.2	3.8	1
10225 Aroclor 5442	12642-23-8	1.2 U	1.2	3.8	1
10225 Aroclor 5460	11126-42-4	1.2 U	1.2	3.8	1
10225 PCB-1016	12674-11-2	0.38 U	0.38	2.0	1
10225 PCB-1221	11104-28-2	0.58 U	0.58	2.0	1
10225 PCB-1232	11141-16-5	0.60 U	0.60	2.0	1
10225 PCB-1242	53469-21-9	0.58 U	0.58	2.0	1
10225 PCB-1248	12672-29-6	0.38 U	0.38	2.0	1
10225 PCB-1254	11097-69-1	0.38 U	0.38	2.0	1
10225 PCB-1260	11096-82-5	0.38 U	0.38	2.0	1
10225 PCB-1262	37324-23-5	0.38 U	0.38	2.0	1
10225 PCB-1268	11100-14-4	0.38 U	0.38	2.0	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643 Aluminum	7429-90-5	33,200	5.66	22.5	1
07914 Boron	7440-42-8	5.01 U	5.01	28.1	5
Reporting limits were raised due to interference from the sample matrix.					
01650 Calcium	7440-70-2	4,930	6.90	22.5	1
01654 Iron	7439-89-6	42,200	26.5	112	5
01656 Lithium	7439-93-2	47.2	0.25	2.2	1
01657 Magnesium	7439-95-4	10,300	2.86	11.2	1
06958 Manganese	7439-96-5	736	0.0877	0.562	1
10145 Phosphorus	7723-14-0	706	0.630	11.2	1
01662 Potassium	7440-09-7	3,800	20.2	56.2	1
01667 Sodium	7440-23-5	197	42.0	112	1
07968 Strontium	7440-24-6	32.9	0.0697	0.562	1
06969 Tin	7440-31-5	3.33 J	1.12	11.2	1
06970 Titanium	7440-32-6	1,570	0.427	1.12	1
10146 Zirconium	7440-67-7	2.49 J	0.945	5.62	1

	SW-846 6020	mg/kg	mg/kg	mg/kg	
06124 Antimony	7440-36-0	0.185 J	0.0669	0.223	2

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SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
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SL122 SDG#: DE060-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6020		mg/kg	mg/kg	mg/kg	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	10.7	0.0891	0.446	2
06126	Barium	7440-39-3	192	0.120	0.446	2
06127	Beryllium	7440-41-7	1.39	0.0178	0.111	2
06128	Cadmium	7440-43-9	0.106 J	0.0446	0.111	2
06131	Chromium	7440-47-3	44.3	0.134	0.446	2
06132	Cobalt	7440-48-4	14.0	0.0223	0.111	2
06133	Copper	7440-50-8	37.0	0.0735	0.446	2
06135	Lead	7439-92-1	17.0	0.0116	0.223	2
06138	Molybdenum	7439-98-7	0.896	0.0557	0.111	2
06139	Nickel	7440-02-0	27.3	0.111	0.446	2
06141	Selenium	7782-49-2	0.381 J	0.0446	0.446	2
06142	Silver	7440-22-4	0.0181 J	0.0134	0.111	2
06145	Thallium	7440-28-0	0.384	0.0334	0.111	2
06148	Vanadium	7440-62-2	67.6	0.0245	0.111	2
06149	Zinc	7440-66-6	97.0	0.624	3.34	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0056 J	0.0032	0.112	1
Wet Chemistry						
	EPA 300.0		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8	0.93	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.8	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.42 J	0.23	1.2	1
	ASTM D1498		mV	mV	mV	
01821	32a OR Potential	n.a.	382	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.91	0.0100	0.0100	1
Wet Chemistry						
	EPA 160.3 modified		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	13.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

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Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL122 SDG#: DE060-12

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-122-SA5B-SB-2.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/18/2011 00:43	Laura M Krieger	1.01
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 18:19	Jason M Long	25.2
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:12	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 15:13	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/27/2011 10:05	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 17:02	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110200023A	01/21/2011 16:42	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 21:36	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	2	110200023A	01/21/2011 09:30	Maria Davenport	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 21:21	John P Hook	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
01654	Iron	SW-846 6010B	1	110195708001	01/21/2011 21:21	John P Hook	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 21:17	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 17:03	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

SL122 SDG#: DE060-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 17:03	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 17:03	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:15	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203B	01/27/2011 13:41	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/25/2011 01:14	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 19:04	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203B	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183558
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

EB-20 SDG#: DE060-13EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1 U	1	5	1
04678	Benzidine	92-87-5	21 U	21	63	1
04678	Benzoic acid	65-85-0	6 U	6	16	1
04678	Benzyl alcohol	100-51-6	5 U	5	16	1
04678	4-Bromophenyl-phenylether	101-55-3	1 U	1	5	1
04678	Carbazole	86-74-8	1 U	1	5	1
04678	4-Chloro-3-methylphenol	59-50-7	1 U	1	5	1
04678	4-Chloroaniline	106-47-8	1 U	1	5	1
04678	bis(2-Chloroethoxy)methane	111-91-1	1 U	1	5	1
04678	bis(2-Chloroethyl)ether	111-44-4	1 U	1	5	1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1 U	1	5	1
04678	2-Chloronaphthalene	91-58-7	2 U	2	5	1
04678	2-Chlorophenol	95-57-8	1 U	1	5	1
04678	4-Chlorophenyl-phenylether	7005-72-3	2 U	2	5	1
04678	Dibenzofuran	132-64-9	1 U	1	5	1
04678	1,2-Dichlorobenzene	95-50-1	1 U	1	5	1
04678	1,3-Dichlorobenzene	541-73-1	1 U	1	5	1
04678	1,4-Dichlorobenzene	106-46-7	1 U	1	5	1
04678	3,3'-Dichlorobenzidine	91-94-1	2 U	2	5	1
04678	2,4-Dichlorophenol	120-83-2	1 U	1	5	1
04678	2,4-Dimethylphenol	105-67-9	3 U	3	11	1
04678	3,5-Dimethylphenol	108-68-9	3 U	3	11	1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5 U	5	16	1
04678	2,4-Dinitrophenol	51-28-5	11 U	11	32	1
04678	2,4-Dinitrotoluene	121-14-2	1 U	1	5	1
04678	2,6-Dinitrotoluene	606-20-2	1 U	1	5	1
04678	1,2-Diphenylhydrazine	122-66-7	1 U	1	5	1
04678	Hexachlorobenzene	118-74-1	1 U	1	5	1
04678	Hexachlorobutadiene	87-68-3	1 U	1	5	1
04678	Hexachlorocyclopentadiene	77-47-4	5 U	5	16	1
04678	Hexachloroethane	67-72-1	1 U	1	5	1
04678	Isophorone	78-59-1	1 U	1	5	1
04678	2-Methylphenol	95-48-7	1 U	1	5	1
04678	4-Methylphenol	106-44-5	2 U	2	5	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04678	2-Nitroaniline	88-74-4	1 U	1	5	1
04678	3-Nitroaniline	99-09-2	1 U	1	5	1
04678	4-Nitroaniline	100-01-6	1 U	1	5	1
04678	Nitrobenzene	98-95-3	1 U	1	5	1
04678	2-Nitrophenol	88-75-5	1 U	1	5	1
04678	4-Nitrophenol	100-02-7	11 U	11	32	1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5	1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3 U	3	16	1
04678	Phenol	108-95-2	1 U	1	5	1

*=This limit was used in the evaluation of the final result

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183558
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

EB-20 SDG#: DE060-13EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l		ug/l	ug/l	
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5	1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5	1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l		ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.012	U	0.012	0.058	1
10137	Acenaphthylene	208-96-8	0.012	U	0.012	0.058	1
10137	Anthracene	120-12-7	0.012	U	0.012	0.058	1
10137	Benzo(a)anthracene	56-55-3	0.012	U	0.012	0.058	1
10137	Benzo(a)pyrene	50-32-8	0.012	U	0.012	0.058	1
10137	Benzo(b)fluoranthene	205-99-2	0.012	U	0.012	0.058	1
10137	Benzo(g,h,i)perylene	191-24-2	0.012	U	0.012	0.058	1
10137	Benzo(k)fluoranthene	207-08-9	0.012	U	0.012	0.058	1
10137	Butylbenzylphthalate	85-68-7	0.058	U	0.058	1.2	1
10137	Di-n-butylphthalate	84-74-2	0.62	J	0.058	1.2	1
10137	Chrysene	218-01-9	0.012	U	0.012	0.058	1
10137	Dibenz(a,h)anthracene	53-70-3	0.012	U	0.012	0.058	1
10137	Diethylphthalate	84-66-2	0.15	J	0.058	1.2	1
10137	Dimethylphthalate	131-11-3	0.058	U	0.058	1.2	1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.27	J	0.058	1.2	1
10137	Fluoranthene	206-44-0	0.012	U	0.012	0.058	1
10137	Fluorene	86-73-7	0.012	U	0.012	0.058	1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.012	U	0.012	0.058	1
10137	1-Methylnaphthalene	90-12-0	0.012	U	0.012	0.058	1
10137	2-Methylnaphthalene	91-57-6	0.012	U	0.012	0.058	1
10137	Naphthalene	91-20-3	0.059	U	0.012	0.058	1
10137	N-Nitrosodimethylamine	62-75-9	0.012	U	0.012	0.058	1
10137	Di-n-octylphthalate	117-84-0	0.058	U	0.058	1.2	1
10137	Phenanthrene	85-01-8	0.012	U	0.012	0.058	1
10137	Pyrene	129-00-0	0.012	U	0.012	0.058	1

The QC limits for n-nitrosodimethylamine are advisory only until sufficient data points can be obtained to calculate statistical limits.

The following compounds were detected in the method blank at the respective concentrations of:

naphthalene .35 ug/l

di-n-butylphthalate .057 ug/l

bis(2-ethylhexyl)phthalate .094 ug/l

These blank values were not subtracted from the analytical results. Sufficient sample was unavailable to repeat the analysis.

Reporting limits were raised due to limited sample volume.

Pesticides/PCBs	SW-846 8082	ug/l		ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.52
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.52
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.52
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.52
10227	PCB-1221	11104-28-2	0.10	U	0.10	0.52

*=This limit was used in the evaluation of the final result

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183558
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

EB-20 SDG#: DE060-13EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8082						
10227	PCB-1232	11141-16-5	0.21 U	0.21	0.52	1
10227	PCB-1242	53469-21-9	0.10 U	0.10	0.52	1
10227	PCB-1248	12672-29-6	0.10 U	0.10	0.52	1
10227	PCB-1254	11097-69-1	0.10 U	0.10	0.52	1
10227	PCB-1260	11096-82-5	0.10 U	0.10	0.52	1
10227	PCB-1262	37324-23-5	0.21 U	0.21	0.52	1
10227	PCB-1268	11100-14-4	0.17 U	0.17	0.52	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B						
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200	1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500	1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200	1
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200	1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200	1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100	1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050	1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100	1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500	1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00	1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050	1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200	1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100	1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500	1
SW-846 6020						
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010	1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020	1
06026	Barium	7440-39-3	0.00053 U	0.00053	0.0020	1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050	1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050	1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020	1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050	1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020	1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010	1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050	1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020	1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020	1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050	1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050	1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050	1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150	1
SW-846 7470A						
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020	1
Wet Chemistry EPA 300.0						
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183558
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

EB-20 SDG#: DE060-13EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 314.0			ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0	1
SW-846 7199			ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199 The holding time was not met.	18540-29-9	5.0 U	5.0	10.0	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	11018WAA026	01/22/2011 15:18	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11017WAD026	01/20/2011 22:00	Gregory J Drahovsky	1
00813	BNA Water Extraction	SW-846 3510C	1	11018WAA026	01/18/2011 15:45	Timothy J Attenberger	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	11017WAD026	01/17/2011 22:15	Elaine F Stoltzfus	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	110180016A	01/27/2011 23:27	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	110180016A	01/19/2011 03:00	Sherry L Morrow	1
01743	Aluminum	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
08014	Boron	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
01750	Calcium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
01754	Iron	SW-846 6010B	2	110201848008	01/21/2011 13:38	Eric L Eby	1
01756	Lithium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
01757	Magnesium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
07058	Manganese	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
10143	Phosphorus	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
01762	Potassium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
01767	Sodium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
08068	Strontium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
07069	Tin	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
07070	Titanium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
10144	Zirconium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
06024	Antimony	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06025	Arsenic	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06026	Barium	SW-846 6020	1	110176050002D	01/21/2011 06:59	David K Beck	1
06027	Beryllium	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06028	Cadmium	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1

*=This limit was used in the evaluation of the final result

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183558
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

EB-20 SDG#: DE060-13EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06031	Chromium	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06032	Cobalt	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06033	Copper	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06035	Lead	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06038	Molybdenum	SW-846 6020	1	110176050002C	01/21/2011 06:59	David K Beck	1
06039	Nickel	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06041	Selenium	SW-846 6020	1	110176050002B	01/21/2011 06:59	David K Beck	1
06042	Silver	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06045	Thallium	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06048	Vanadium	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06049	Zinc	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
00259	Mercury	SW-846 7470A	1	110175713003	01/18/2011 08:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110171848002	01/18/2011 10:03	Denise K Conners	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	2	110201848008	01/20/2011 20:00	Mirit S Shenouda	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	110176050002	01/18/2011 10:00	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	110175713003	01/17/2011 14:30	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	11026196602A	01/27/2011 01:16	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	11019621701A	01/19/2011 15:15	William L Hamaker Jr	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	11019196401B	01/19/2011 11:16	Ashley M Adams	1

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183559
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

EB-21 SDG#: DE060-14EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1 U	1	5	1
04678	Benzidine	92-87-5	22 U	22	65	1
04678	Benzoic acid	65-85-0	6 U	6	16	1
04678	Benzyl alcohol	100-51-6	5 U	5	16	1
04678	4-Bromophenyl-phenylether	101-55-3	1 U	1	5	1
04678	Carbazole	86-74-8	1 U	1	5	1
04678	4-Chloro-3-methylphenol	59-50-7	1 U	1	5	1
04678	4-Chloroaniline	106-47-8	1 U	1	5	1
04678	bis(2-Chloroethoxy)methane	111-91-1	1 U	1	5	1
04678	bis(2-Chloroethyl)ether	111-44-4	1 U	1	5	1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1 U	1	5	1
04678	2-Chloronaphthalene	91-58-7	2 U	2	5	1
04678	2-Chlorophenol	95-57-8	1 U	1	5	1
04678	4-Chlorophenyl-phenylether	7005-72-3	2 U	2	5	1
04678	Dibenzofuran	132-64-9	1 U	1	5	1
04678	1,2-Dichlorobenzene	95-50-1	1 U	1	5	1
04678	1,3-Dichlorobenzene	541-73-1	1 U	1	5	1
04678	1,4-Dichlorobenzene	106-46-7	1 U	1	5	1
04678	3,3'-Dichlorobenzidine	91-94-1	2 U	2	5	1
04678	2,4-Dichlorophenol	120-83-2	1 U	1	5	1
04678	2,4-Dimethylphenol	105-67-9	3 U	3	11	1
04678	3,5-Dimethylphenol	108-68-9	3 U	3	11	1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5 U	5	16	1
04678	2,4-Dinitrophenol	51-28-5	11 U	11	32	1
04678	2,4-Dinitrotoluene	121-14-2	1 U	1	5	1
04678	2,6-Dinitrotoluene	606-20-2	1 U	1	5	1
04678	1,2-Diphenylhydrazine	122-66-7	1 U	1	5	1
04678	Hexachlorobenzene	118-74-1	1 U	1	5	1
04678	Hexachlorobutadiene	87-68-3	1 U	1	5	1
04678	Hexachlorocyclopentadiene	77-47-4	5 U	5	16	1
04678	Hexachloroethane	67-72-1	1 U	1	5	1
04678	Isophorone	78-59-1	1 U	1	5	1
04678	2-Methylphenol	95-48-7	1 U	1	5	1
04678	4-Methylphenol	106-44-5	2 U	2	5	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04678	2-Nitroaniline	88-74-4	1 U	1	5	1
04678	3-Nitroaniline	99-09-2	1 U	1	5	1
04678	4-Nitroaniline	100-01-6	1 U	1	5	1
04678	Nitrobenzene	98-95-3	1 U	1	5	1
04678	2-Nitrophenol	88-75-5	1 U	1	5	1
04678	4-Nitrophenol	100-02-7	11 U	11	32	1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5	1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3 U	3	16	1
04678	Phenol	108-95-2	1 U	1	5	1

*=This limit was used in the evaluation of the final result

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183559
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

EB-21 SDG#: DE060-14EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l		ug/l	ug/l	
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5	1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5	1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l		ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010	U	0.010	0.051	1
10137	Acenaphthylene	208-96-8	0.010	U	0.010	0.051	1
10137	Anthracene	120-12-7	0.010	U	0.010	0.051	1
10137	Benzo(a)anthracene	56-55-3	0.010	U	0.010	0.051	1
10137	Benzo(a)pyrene	50-32-8	0.010	U	0.010	0.051	1
10137	Benzo(b)fluoranthene	205-99-2	0.010	U	0.010	0.051	1
10137	Benzo(g,h,i)perylene	191-24-2	0.010	U	0.010	0.051	1
10137	Benzo(k)fluoranthene	207-08-9	0.010	U	0.010	0.051	1
10137	Butylbenzylphthalate	85-68-7	0.051	U	0.051	1.0	1
10137	Di-n-butylphthalate	84-74-2	0.57	J	0.051	1.0	1
10137	Chrysene	218-01-9	0.010	U	0.010	0.051	1
10137	Dibenz(a,h)anthracene	53-70-3	0.010	U	0.010	0.051	1
10137	Diethylphthalate	84-66-2	0.15	J	0.051	1.0	1
10137	Dimethylphthalate	131-11-3	0.051	U	0.051	1.0	1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.051	U	0.051	1.0	1
10137	Fluoranthene	206-44-0	0.010	U	0.010	0.051	1
10137	Fluorene	86-73-7	0.010	U	0.010	0.051	1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010	U	0.010	0.051	1
10137	1-Methylnaphthalene	90-12-0	0.010	U	0.010	0.051	1
10137	2-Methylnaphthalene	91-57-6	0.010	U	0.010	0.051	1
10137	Naphthalene	91-20-3	0.029	J	0.010	0.051	1
10137	N-Nitrosodimethylamine	62-75-9	0.010	U	0.010	0.051	1
10137	Di-n-octylphthalate	117-84-0	0.051	U	0.051	1.0	1
10137	Phenanthrene	85-01-8	0.010	U	0.010	0.051	1
10137	Pyrene	129-00-0	0.010	U	0.010	0.051	1

The QC limits for n-nitrosodimethylamine are advisory only until sufficient data points can be obtained to calculate statistical limits.

The following compounds were detected in the method blank at the respective concentrations of:

naphthalene .35 ug/l

2-methylnaphthalene .054 ug/l

di-n-butylphthalate .057 ug/l

These blank values were not subtracted from the analytical results. Sufficient sample was unavailable to repeat the analysis.

The GC/MS semivolatile surrogate recoveries are outside of QC limits in this sample. Sufficient sample was unavailable to repeat the analysis.

Pesticides/PCBs		SW-846 8082	ug/l		ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.52	1
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.52	1
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.52	1
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.52	1

*=This limit was used in the evaluation of the final result

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183559
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

EB-21 SDG#: DE060-14EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Pesticides/PCBs SW-846 8082						
10227	PCB-1221	11104-28-2	0.10 U	0.10	0.52	1
10227	PCB-1232	11141-16-5	0.21 U	0.21	0.52	1
10227	PCB-1242	53469-21-9	0.10 U	0.10	0.52	1
10227	PCB-1248	12672-29-6	0.10 U	0.10	0.52	1
10227	PCB-1254	11097-69-1	0.10 U	0.10	0.52	1
10227	PCB-1260	11096-82-5	0.10 U	0.10	0.52	1
10227	PCB-1262	37324-23-5	0.21 U	0.21	0.52	1
10227	PCB-1268	11100-14-4	0.17 U	0.17	0.52	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals SW-846 6010B						
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200	1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500	1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200	1
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200	1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200	1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100	1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050	1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100	1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500	1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00	1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050	1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200	1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100	1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500	1
SW-846 6020						
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010	1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020	1
06026	Barium	7440-39-3	0.00053 U	0.00053	0.0020	1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050	1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050	1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020	1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050	1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020	1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010	1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050	1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020	1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020	1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050	1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050	1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050	1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150	1
SW-846 7470A						
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020	1
Wet Chemistry EPA 300.0						

*=This limit was used in the evaluation of the final result

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183559
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

EB-21 SDG#: DE060-14EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 300.0						
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10	1
EPA 314.0						
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0	1
SW-846 7199						
06467	3b Cr VI by EPA 7199 The holding time was not met.	18540-29-9	5.0 U	5.0	10.0	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	11018WAA026	01/22/2011 15:44	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11017WAD026	01/20/2011 22:33	Gregory J Drahovsky	1
00813	BNA Water Extraction	SW-846 3510C	1	11018WAA026	01/18/2011 15:45	Timothy J Attenberger	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	11017WAD026	01/17/2011 22:15	Elaine F Stoltzfus	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	110180016A	01/27/2011 23:45	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	110180016A	01/19/2011 03:00	Sherry L Morrow	1
01743	Aluminum	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
08014	Boron	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
01750	Calcium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
01754	Iron	SW-846 6010B	1	110201848008	01/21/2011 13:41	Eric L Eby	1
01756	Lithium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
01757	Magnesium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
07058	Manganese	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
10143	Phosphorus	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
01762	Potassium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
01767	Sodium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
08068	Strontium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
07069	Tin	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
07070	Titanium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
10144	Zirconium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
06024	Antimony	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06025	Arsenic	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1

*=This limit was used in the evaluation of the final result

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183559
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

EB-21 SDG#: DE060-14EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06026	Barium	SW-846 6020	1	110176050002D	01/21/2011 07:02	David K Beck	1
06027	Beryllium	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06028	Cadmium	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06031	Chromium	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06032	Cobalt	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06033	Copper	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06035	Lead	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06038	Molybdenum	SW-846 6020	1	110176050002C	01/21/2011 07:02	David K Beck	1
06039	Nickel	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06041	Selenium	SW-846 6020	1	110176050002B	01/21/2011 07:02	David K Beck	1
06042	Silver	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06045	Thallium	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06048	Vanadium	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06049	Zinc	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
00259	Mercury	SW-846 7470A	1	110175713003	01/18/2011 08:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110171848002	01/18/2011 10:03	Denise K Conners	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	2	110201848008	01/20/2011 20:00	Mirit S Shenouda	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	110176050002	01/18/2011 10:00	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	110175713003	01/17/2011 14:30	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	11026196602A	01/27/2011 01:32	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	11019621701A	01/19/2011 15:38	William L Hamaker Jr	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	11019196401B	01/19/2011 13:08	Ashley M Adams	1

Sample Description: TB-011311 Water
SSFL Area IV Collocated Soil Sampling
TB-011311

LLI Sample # WW 6183560
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

TB113 SDG#: DE060-15TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6 U	6	20	1
10904	Benzene	71-43-2	0.5 U	0.5	5	1
10904	Bromobenzene	108-86-1	1 U	1	5	1
10904	Bromochloromethane	74-97-5	1 U	1	5	1
10904	Bromodichloromethane	75-27-4	1 U	1	5	1
10904	Bromoform	75-25-2	1 U	1	5	1
10904	Bromomethane	74-83-9	1 U	1	5	1
10904	2-Butanone	78-93-3	3 U	3	10	1
10904	n-Butylbenzene	104-51-8	1 U	1	5	1
10904	sec-Butylbenzene	135-98-8	1 U	1	5	1
10904	tert-Butylbenzene	98-06-6	1 U	1	5	1
10904	Carbon Tetrachloride	56-23-5	1 U	1	5	1
10904	Chlorobenzene	108-90-7	0.8 U	0.8	5	1
10904	Chloroethane	75-00-3	1 U	1	5	1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2 U	2	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.					
10904	Chloroform	67-66-3	0.8 U	0.8	5	1
10904	Chloromethane	74-87-3	1 U	1	5	1
10904	2-Chlorotoluene	95-49-8	1 U	1	5	1
10904	4-Chlorotoluene	106-43-4	1 U	1	5	1
10904	Chlorotrifluoroethene	79-38-9	2 U	2	5	1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2 U	2	5	1
10904	Dibromochloromethane	124-48-1	1 U	1	5	1
10904	1,2-Dibromoethane	106-93-4	1 U	1	5	1
10904	Dibromomethane	74-95-3	1 U	1	5	1
10904	1,2-Dichlorobenzene	95-50-1	1 U	1	5	1
10904	1,3-Dichlorobenzene	541-73-1	1 U	1	5	1
10904	1,4-Dichlorobenzene	106-46-7	1 U	1	5	1
10904	Dichlorodifluoromethane	75-71-8	2 U	2	5	1
10904	1,1-Dichloroethane	75-34-3	1 U	1	5	1
10904	1,2-Dichloroethane	107-06-2	1 U	1	5	1
10904	1,1-Dichloroethene	75-35-4	0.8 U	0.8	5	1
10904	cis-1,2-Dichloroethene	156-59-2	0.8 U	0.8	5	1
10904	trans-1,2-Dichloroethene	156-60-5	0.8 U	0.8	5	1
10904	1,2-Dichloropropane	78-87-5	1 U	1	5	1
10904	1,3-Dichloropropane	142-28-9	1 U	1	5	1
10904	2,2-Dichloropropane	594-20-7	1 U	1	5	1
10904	1,1-Dichloropropene	563-58-6	1 U	1	5	1
10904	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5	1
10904	trans-1,3-Dichloropropene	10061-02-6	1 U	1	5	1
10904	Ethylbenzene	100-41-4	0.8 U	0.8	5	1
10904	Freon 113	76-13-1	2 U	2	10	1
10904	Freon 133a	75-88-7	2 U	2	5	1
10904	Hexachlorobutadiene	87-68-3	2 U	2	5	1
10904	2-Hexanone	591-78-6	3 U	3	10	1
10904	Isopropylbenzene	98-82-8	1 U	1	5	1
10904	p-Isopropyltoluene	99-87-6	1 U	1	5	1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5	1
10904	4-Methyl-2-pentanone	108-10-1	3 U	3	10	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-011311 Water
SSFL Area IV Collocated Soil Sampling
TB-011311

LLI Sample # WW 6183560
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 02/08/2011 13:21

TB113 SDG#: DE060-15TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l		ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2	U	2	5	1
10904	n-Propylbenzene	103-65-1	1	U	1	5	1
10904	Styrene	100-42-5	1	U	1	5	1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5	1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5	1
10904	Tetrachloroethene	127-18-4	0.8	U	0.8	5	1
10904	Toluene	108-88-3	0.7	U	0.7	5	1
10904	1,2,3-Trichlorobenzene	87-61-6	1	U	1	5	1
10904	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5	1
10904	1,1,1-Trichloroethane	71-55-6	0.8	U	0.8	5	1
10904	1,1,2-Trichloroethane	79-00-5	0.8	U	0.8	5	1
10904	Trichloroethene	79-01-6	1	U	1	5	1
10904	Trichlorofluoromethane	75-69-4	2	U	2	5	1
10904	1,2,3-Trichloropropane	96-18-4	1	U	1	5	1
10904	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5	1
10904	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5	1
10904	Vinyl Chloride	75-01-4	1	U	1	5	1
10904	m+p-Xylene	179601-23-1	0.8	U	0.8	5	1
10904	o-Xylene	95-47-6	0.8	U	0.8	5	1
GC/MS	Volatiles	SW-846 8260B SIM	ug/l		ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics	SW-846 8260B	1	Y110141AA	01/14/2011 16:58	Frank A Valla, Jr	1
	EPA8260						
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110191AA	01/19/2011 10:48	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y110141AA	01/14/2011 16:58	Frank A Valla, Jr	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	E110191AA	01/19/2011 10:48	Jason M Long	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B110172AA Sample number(s): 6183546-6183547, 6183549, 6183551, 6183553-6183554, 6183557									
Acetone	6.7 U	6.7	8.0	ug/kg	119	114	32-209	4	30
Benzene	0.10 U	0.10	4.0	ug/kg	101	101	80-120	0	30
Bromobenzene	0.13 U	0.13	4.0	ug/kg	94	96	79-120	2	30
Bromochloromethane	0.33 U	0.33	4.0	ug/kg	107	105	79-124	2	30
Bromodichloromethane	0.08 U	0.08	4.0	ug/kg	96	95	78-120	2	30
Bromoform	0.40 U	0.40	4.0	ug/kg	106	102	70-120	4	30
Bromomethane	0.25 U	0.25	4.0	ug/kg	70	71	32-162	3	30
2-Butanone	1.2 U	1.2	8.0	ug/kg	97	96	46-153	1	30
n-Butylbenzene	0.12 U	0.12	4.0	ug/kg	93	94	72-120	1	30
sec-Butylbenzene	0.06 U	0.06	4.0	ug/kg	92	93	75-120	2	30
tert-Butylbenzene	0.16 U	0.16	4.0	ug/kg	89	91	75-120	2	30
Carbon Tetrachloride	0.14 U	0.14	4.0	ug/kg	103	104	69-122	0	30
Chlorobenzene	0.11 U	0.11	4.0	ug/kg	101	101	80-120	0	30
Chloroethane	0.13 U	0.13	4.0	ug/kg	71	72	37-154	1	30
2-Chloroethyl Vinyl Ether	0.30 U	0.30	4.0	ug/kg	87	89	43-146	3	30
Chloroform	0.12 U	0.12	4.0	ug/kg	101	101	80-120	0	30
Chloromethane	0.33 U	0.33	4.0	ug/kg	73	82	54-132	12	30
2-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	95	97	78-120	2	30
4-Chlorotoluene	0.14 U	0.14	4.0	ug/kg	95	96	79-120	1	30
Chlorotrifluoroethene	0.50 U	0.50	5.0	ug/kg	110	114	22-131	4	30
1,2-Dibromo-3-chloropropane	0.70 U	0.70	4.0	ug/kg	85	87	58-120	1	30
Dibromochloromethane	0.20 U	0.20	4.0	ug/kg	101	100	77-120	2	30
1,2-Dibromoethane	0.17 U	0.17	4.0	ug/kg	100	100	80-120	1	30
Dibromomethane	0.24 U	0.24	4.0	ug/kg	103	101	80-120	2	30
1,2-Dichlorobenzene	0.09 U	0.09	4.0	ug/kg	99	99	79-120	0	30
1,3-Dichlorobenzene	0.12 U	0.12	4.0	ug/kg	95	97	78-120	1	30
1,4-Dichlorobenzene	0.16 U	0.16	4.0	ug/kg	98	97	79-120	1	30
Dichlorodifluoromethane	0.12 U	0.12	4.0	ug/kg	67	67	20-120	1	30
1,1-Dichloroethane	0.10 U	0.10	4.0	ug/kg	98	100	80-120	2	30
1,2-Dichloroethane	0.15 U	0.15	4.0	ug/kg	98	98	71-129	0	30
1,1-Dichloroethene	0.39 U	0.39	4.0	ug/kg	100	100	73-123	0	30
cis-1,2-Dichloroethene	0.19 U	0.19	4.0	ug/kg	103	104	80-120	1	30
trans-1,2-Dichloroethene	0.12 U	0.12	4.0	ug/kg	104	104	79-120	0	30
1,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	95	96	80-120	1	30
1,3-Dichloropropane	0.08 U	0.08	4.0	ug/kg	94	95	80-120	1	30
2,2-Dichloropropane	0.17 U	0.17	4.0	ug/kg	103	102	72-123	1	30
1,1-Dichloropropene	0.13 U	0.13	4.0	ug/kg	96	97	77-120	1	30
cis-1,3-Dichloropropene	0.16 U	0.16	4.0	ug/kg	87	88	80-120	0	30
trans-1,3-Dichloropropene	0.17 U	0.17	4.0	ug/kg	87	88	77-120	0	30
Ethylbenzene	0.06 U	0.06	4.0	ug/kg	96	96	80-120	0	30
Freon 113	0.11 U	0.11	4.0	ug/kg	99	99	61-126	0	30
Freon 133a	0.50 U	0.50	5.0	ug/kg	87	90	78-120	3	30
Hexachlorobutadiene	0.14 U	0.14	4.0	ug/kg	94	95	57-120	1	30
2-Hexanone	1.6 U	1.6	8.0	ug/kg	69	69	45-155	0	30
Isopropylbenzene	0.06 U	0.06	4.0	ug/kg	96	96	76-120	0	30
p-Isopropyltoluene	0.11 U	0.11	4.0	ug/kg	94	95	75-120	2	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21 U	0.21	4.0	ug/kg	94	98	74-121	4	30
4-Methyl-2-pentanone	0.39 U	0.39	8.0	ug/kg	68	68	61-134	0	30
Methylene Chloride	0.76 J	0.24	4.0	ug/kg	98	99	76-124	1	30
n-Propylbenzene	0.07 U	0.07	4.0	ug/kg	95	96	77-120	1	30
Styrene	0.10 U	0.10	4.0	ug/kg	99	99	76-120	0	30
1,1,1,2-Tetrachloroethane	0.11 U	0.11	4.0	ug/kg	105	105	80-120	0	30
1,1,2,2-Tetrachloroethane	0.23 U	0.23	4.0	ug/kg	91	92	71-123	1	30
Tetrachloroethene	0.20 U	0.20	4.0	ug/kg	113	108	77-120	4	30
Toluene	0.32 J	0.08	4.0	ug/kg	102	101	80-120	0	30
1,2,3-Trichlorobenzene	0.14 U	0.14	4.0	ug/kg	92	93	64-120	1	30
1,2,4-Trichlorobenzene	0.18 U	0.18	4.0	ug/kg	87	89	68-120	3	30
1,1,1-Trichloroethane	0.20 U	0.20	4.0	ug/kg	102	102	71-125	0	30
1,1,2-Trichloroethane	0.27 U	0.27	4.0	ug/kg	102	101	80-120	1	30
Trichloroethene	0.15 U	0.15	4.0	ug/kg	99	99	80-120	0	30
Trichlorofluoromethane	0.29 U	0.29	4.0	ug/kg	85	84	58-133	1	30
1,2,3-Trichloropropane	0.33 U	0.33	4.0	ug/kg	95	96	71-123	2	30
1,2,4-Trimethylbenzene	0.40 U	0.40	4.0	ug/kg	95	96	79-120	1	30
1,3,5-Trimethylbenzene	0.10 U	0.10	4.0	ug/kg	93	94	78-120	1	30
Vinyl Chloride	0.20 U	0.20	4.0	ug/kg	75	78	53-120	3	30
m+p-Xylene	0.17 U	0.17	4.0	ug/kg	102	101	80-120	0	30
o-Xylene	0.17 U	0.17	4.0	ug/kg	92	94	80-120	2	30

Batch number: E110171AA Sample number(s): 6183546-6183547, 6183549, 6183551, 6183553-6183554, 6183557
1,4-Dioxane 5.0 U 5.0 15 ug/kg 105 98 70-130 7 30

Batch number: E110191AA Sample number(s): 6183560
1,4-Dioxane 0.5 U 0.5 2.0 ug/l 105 108 60-132 3 30

Batch number: Y110141AA Sample number(s): 6183560

Acetone	6	U	6.	20	ug/l	157	140	49-234	12	30
Benzene	0.5	U	0.5	5	ug/l	97	99	79-120	2	30
Bromobenzene	1	U	1.	5	ug/l	100	101	80-120	1	30
Bromochloromethane	1	U	1.	5	ug/l	105	101	80-120	4	30
Bromodichloromethane	1	U	1.	5	ug/l	104	103	80-120	1	30
Bromoform	1	U	1.	5	ug/l	98	96	61-120	3	30
Bromomethane	1	U	1.	5	ug/l	103	102	44-120	1	30
2-Butanone	3	U	3.	10	ug/l	124	115	66-151	7	30
n-Butylbenzene	1	U	1.	5	ug/l	96	95	74-120	1	30
sec-Butylbenzene	1	U	1.	5	ug/l	100	99	78-120	1	30
tert-Butylbenzene	1	U	1.	5	ug/l	97	97	80-120	0	30
Carbon Tetrachloride	1	U	1.	5	ug/l	109	106	75-123	3	30
Chlorobenzene	0.8	U	0.8	5	ug/l	97	97	80-120	0	30
Chloroethane	1	U	1.	5	ug/l	104	103	49-129	1	30
2-Chloroethyl Vinyl Ether	2	U	2.	10	ug/l	109	108	56-129	1	30
Chloroform	0.8	U	0.8	5	ug/l	108	108	77-122	0	30
Chloromethane	1	U	1.	5	ug/l	110	110	60-129	0	30
2-Chlorotoluene	1	U	1.	5	ug/l	99	99	80-120	0	30
4-Chlorotoluene	1	U	1.	5	ug/l	97	97	80-120	0	30
Chlorotrifluoroethene	2	U	2.	5	ug/l	78	76	38-136	2	30
1,2-Dibromo-3-chloropropane	2	U	2.	5	ug/l	102	96	66-120	6	30
Dibromochloromethane	1	U	1.	5	ug/l	99	99	80-120	0	30
1,2-Dibromoethane	1	U	1.	5	ug/l	99	101	80-120	1	30
Dibromomethane	1	U	1.	5	ug/l	104	102	80-120	2	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	94	94	80-120	0	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	97	97	80-120	0	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	98	96	80-120	2	30
Dichlorodifluoromethane	2	U	2.	5	ug/l	110	109	47-120	0	30
1,1-Dichloroethane	1	U	1.	5	ug/l	100	103	79-120	3	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1 U	1.	5	ug/l	116	113	70-130	3	30
1,1-Dichloroethene	0.8 U	0.8	5	ug/l	103	100	74-123	3	30
cis-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	99	102	80-120	3	30
trans-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	99	100	80-120	1	30
1,2-Dichloropropane	1 U	1.	5	ug/l	96	95	78-120	2	30
1,3-Dichloropropane	1 U	1.	5	ug/l	100	103	80-120	3	30
2,2-Dichloropropane	1 U	1.	5	ug/l	108	108	77-124	1	30
1,1-Dichloropropene	1 U	1.	5	ug/l	102	102	80-120	0	30
cis-1,3-Dichloropropene	1 U	1.	5	ug/l	98	96	80-120	1	30
trans-1,3-Dichloropropene	1 U	1.	5	ug/l	99	101	79-120	2	30
Ethylbenzene	0.8 U	0.8	5	ug/l	97	98	79-120	1	30
Freon 113	2 U	2.	10	ug/l	106	106	69-128	1	30
Freon 133a	2 U	2.	5	ug/l	93	94	77-120	1	30
Hexachlorobutadiene	2 U	2.	5	ug/l	95	97	58-120	3	30
2-Hexanone	3 U	3.	10	ug/l	113	109	65-136	4	30
Isopropylbenzene	1 U	1.	5	ug/l	97	96	77-120	1	30
p-Isopropyltoluene	1 U	1.	5	ug/l	101	100	80-120	1	30
Methyl Tertiary Butyl Ether	0.5 U	0.5	5	ug/l	106	106	76-120	0	30
4-Methyl-2-pentanone	3 U	3.	10	ug/l	100	97	70-121	3	30
Methylene Chloride	2 U	2.	5	ug/l	101	97	80-120	3	30
n-Propylbenzene	1 U	1.	5	ug/l	100	99	80-120	0	30
Styrene	1 U	1.	5	ug/l	96	96	80-120	0	30
1,1,1,2-Tetrachloroethane	1 U	1.	5	ug/l	99	100	80-120	1	30
1,1,2,2-Tetrachloroethane	1 U	1.	5	ug/l	93	95	71-120	2	30
Tetrachloroethene	0.8 U	0.8	5	ug/l	99	100	80-121	1	30
Toluene	0.7 U	0.7	5	ug/l	95	96	79-120	1	30
1,2,3-Trichlorobenzene	1 U	1.	5	ug/l	102	102	65-120	1	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	101	99	67-120	2	30
1,1,1-Trichloroethane	0.8 U	0.8	5	ug/l	96	97	75-127	1	30
1,1,2-Trichloroethane	0.8 U	0.8	5	ug/l	97	100	80-120	3	30
Trichloroethene	1 U	1.	5	ug/l	101	101	80-120	0	30
Trichlorofluoromethane	2 U	2.	5	ug/l	111	109	64-129	2	30
1,2,3-Trichloropropane	1 U	1.	5	ug/l	103	102	80-120	1	30
1,2,4-Trimethylbenzene	1 U	1.	5	ug/l	99	99	74-120	0	30
1,3,5-Trimethylbenzene	1 U	1.	5	ug/l	98	98	75-120	0	30
Vinyl Chloride	1 U	1.	5	ug/l	95	94	65-125	1	30
m+p-Xylene	0.8 U	0.8	5	ug/l	95	95	80-120	0	30
o-Xylene	0.8 U	0.8	5	ug/l	95	96	80-120	2	30

Batch number: 11017WAD026

Sample number(s): 6183558-6183559

Acenaphthene	0.035 J	0.010	0.050	ug/l	96	95	74-109	1	30
Acenaphthylene	0.010 U	0.010	0.050	ug/l	100	101	70-110	1	30
Anthracene	0.014 J	0.010	0.050	ug/l	100	97	66-111	3	30
Benzo(a)anthracene	0.017 J	0.010	0.050	ug/l	99	98	72-114	1	30
Benzo(a)pyrene	0.014 J	0.010	0.050	ug/l	117*	117*	64-115	0	30
Benzo(b)fluoranthene	0.017 J	0.010	0.050	ug/l	123	123	69-123	0	30
Benzo(g,h,i)perylene	0.016 J	0.010	0.050	ug/l	113	124	68-125	10	30
Benzo(k)fluoranthene	0.020 J	0.010	0.050	ug/l	126*	124*	72-122	2	30
Butylbenzylphthalate	0.050 U	0.050	1.0	ug/l	99	95	70-130	3	30
Di-n-butylphthalate	0.057 J	0.050	1.0	ug/l	109	104	70-130	5	30
Chrysene	0.020 J	0.010	0.050	ug/l	98	98	76-116	1	30
Dibenz(a,h)anthracene	0.015 J	0.010	0.050	ug/l	114	125	71-125	9	30
Diethylphthalate	0.050 U	0.050	1.0	ug/l	100	98	70-130	2	30
Dimethylphthalate	0.050 U	0.050	1.0	ug/l	86	83	70-130	4	30
Bis(2-Ethylhexyl)phthalate	0.094 J	0.050	1.0	ug/l	107	108	70-130	1	30
Fluoranthene	0.022 J	0.010	0.050	ug/l	101	98	75-116	3	30
Fluorene	0.038 J	0.010	0.050	ug/l	102	100	75-114	2	30
Indeno(1,2,3-cd)pyrene	0.016 J	0.010	0.050	ug/l	114	126*	69-124	10	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
1-Methylnaphthalene	0.032 J	0.010	0.050	ug/l	98	98	71-117	0	30
2-Methylnaphthalene	0.054	0.010	0.050	ug/l	94	93	75-115	1	30
Naphthalene	0.35	0.010	0.050	ug/l	95	92	72-109	3	30
N-Nitrosodimethylamine	0.010 U	0.010	0.050	ug/l	63*	63*	70-130	1	30
Di-n-octylphthalate	0.050 U	0.050	1.0	ug/l	118	116	70-130	1	30
Phenanthrene	0.046 J	0.010	0.050	ug/l	98	95	76-111	4	30
Pyrene	0.017 J	0.010	0.050	ug/l	96	95	69-118	1	30

Batch number: 11018WAA026

Sample number(s): 6183558-6183559

Aniline	1	U	1.	5	ug/l	70	78	49-101	11	30
Benzidine	20	U	20.	60	ug/l	72	74	20-109	2	30
Benzoic acid	6	U	6.	15	ug/l	26	43	10-69	52*	30
Benzyl alcohol	5	U	5.	15	ug/l	72	81	66-97	12	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	94	96	82-117	2	30
Carbazole	1	U	1.	5	ug/l	95	98	81-114	3	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	90	93	70-123	4	30
4-Chloroaniline	1	U	1.	5	ug/l	55	55	42-124	0	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	93	93	74-124	0	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	91	96	77-108	5	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	92	95	62-127	3	30
2-Chloronaphthalene	2	U	2.	5	ug/l	78	76	54-132	3	30
2-Chlorophenol	1	U	1.	5	ug/l	88	93	77-108	6	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	95	95	82-111	0	30
Dibenzofuran	1	U	1.	5	ug/l	96	96	83-108	0	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	87	88	67-108	1	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	85	86	63-110	1	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	85	86	65-113	1	30
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	59	62	49-111	6	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	92	96	80-109	4	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	92	93	72-110	1	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	100	104	70-130	4	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	89	95	78-119	6	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	87	97	64-120	11	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	95	97	81-115	3	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	96	97	85-115	1	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	99	102	78-116	3	30
Hexachlorobenzene	1	U	1.	5	ug/l	95	98	81-118	3	30
Hexachlorobutadiene	1	U	1.	5	ug/l	86	86	57-124	0	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	74	75	10-118	2	30
Hexachloroethane	1	U	1.	5	ug/l	82	83	52-113	2	30
Isophorone	1	U	1.	5	ug/l	94	96	74-117	2	30
2-Methylphenol	1	U	1.	5	ug/l	80	87	64-101	8	30
4-Methylphenol	2	U	2.	5	ug/l	69	77	61-103	11	30
2-Nitroaniline	1	U	1.	5	ug/l	95	96	83-116	1	30
3-Nitroaniline	1	U	1.	5	ug/l	92	95	74-113	3	30
4-Nitroaniline	1	U	1.	5	ug/l	77	77	59-100	0	30
Nitrobenzene	1	U	1.	5	ug/l	92	93	75-109	2	30
2-Nitrophenol	1	U	1.	5	ug/l	91	95	86-120	5	30
4-Nitrophenol	10	U	10.	30	ug/l	33	39	16-78	17	30
N-Nitroso-di-n-propylamine	1	U	1.	5	ug/l	93	97	69-110	5	30
N-Nitrosodiphenylamine	2	U	2.	5	ug/l	95	98	67-136	3	30
Pentachlorophenol	3	U	3.	15	ug/l	97	99	53-110	3	30
Phenol	1	U	1.	5	ug/l	34	42	29-67	20	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	88	89	71-112	1	30
2,4,5-Trichlorophenol	1	U	1.	5	ug/l	91	96	79-107	5	30
2,4,6-Trichlorophenol	1	U	1.	5	ug/l	93	97	81-113	4	30

Batch number: 11019SLA026

Sample number(s): 6183546-6183557

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Aniline	170 U	170.	500	ug/kg	64		10-107		
Benzidine	1,200 U	1,200.	3,300	ug/kg	45		15-121		
Benzoic acid	170 U	170.	500	ug/kg	105		10-154		
Benzyl alcohol	170 U	170.	500	ug/kg	98		68-111		
4-Bromophenyl-phenylether	17	U 17.	170	ug/kg	94		79-117		
Carbazole	17	U 17.	170	ug/kg	97		77-113		
4-Chloro-3-methylphenol	33	U 33.	170	ug/kg	96		74-119		
4-Chloroaniline	67	U 67.	170	ug/kg	36		10-110		
bis(2-Chloroethoxy)methane	17	U 17.	170	ug/kg	93		70-118		
bis(2-Chloroethyl)ether	17	U 17.	170	ug/kg	95		70-104		
bis(2-Chloroisopropyl)ether	17	U 17.	170	ug/kg	91		68-131		
2-Chloronaphthalene	17	U 17.	170	ug/kg	78		67-127		
2-Chlorophenol	17	U 17.	170	ug/kg	95		72-112		
4-Chlorophenyl-phenylether	33	U 33.	170	ug/kg	95		79-110		
Dibenzofuran	17	U 17.	170	ug/kg	95		79-108		
1,2-Dichlorobenzene	17	U 17.	170	ug/kg	89		79-102		
1,3-Dichlorobenzene	17	U 17.	170	ug/kg	89		70-98		
1,4-Dichlorobenzene	17	U 17.	170	ug/kg	88		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	65		38-105		
2,4-Dichlorophenol	17	U 17.	170	ug/kg	97		75-111		
2,4-Dimethylphenol	33	U 33.	170	ug/kg	98		72-111		
3,5-Dimethylphenol	33	U 33.	170	ug/kg	106		70-130		
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	80		53-110		
2,4-Dinitrophenol	670 U	670.	2,000	ug/kg	77		37-120		
2,4-Dinitrotoluene	33	U 33.	170	ug/kg	96		73-115		
2,6-Dinitrotoluene	17	U 17.	170	ug/kg	98		79-115		
1,2-Diphenylhydrazine	17	U 17.	170	ug/kg	99		77-111		
bis(2-Ethylhexyl)phthalate	17	J 17.	330	ug/kg	97		75-117		
Hexachlorobenzene	17	U 17.	170	ug/kg	94		78-116		
Hexachlorobutadiene	67	U 67.	170	ug/kg	90		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	80		46-115		
Hexachloroethane	17	U 17.	170	ug/kg	85		68-105		
Isophorone	17	U 17.	170	ug/kg	95		69-110		
2-Methylphenol	33	U 33.	170	ug/kg	100		66-110		
4-Methylphenol	33	U 33.	170	ug/kg	92		66-117		
2-Nitroaniline	17	U 17.	170	ug/kg	96		78-116		
3-Nitroaniline	33	U 33.	170	ug/kg	94		62-109		
4-Nitroaniline	67	U 67.	170	ug/kg	74		49-98		
Nitrobenzene	17	U 17.	170	ug/kg	94		71-104		
2-Nitrophenol	17	U 17.	170	ug/kg	92		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	82		56-118		
N-Nitroso-di-n-propylamine	17	U 17.	170	ug/kg	92		63-107		
N-Nitrosodiphenylamine	17	U 17.	170	ug/kg	98		67-141		
Di-n-octylphthalate	17	U 17.	170	ug/kg	95		68-130		
Pentachlorophenol	170 U	170.	500	ug/kg	86		35-106		
Phenol	17	U 17.	170	ug/kg	97		58-112		
1,2,4-Trichlorobenzene	17	U 17.	170	ug/kg	91		73-108		
2,4,5-Trichlorophenol	33	U 33.	170	ug/kg	96		76-107		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS %REC	LCS/LCSD Limits	RPD	RPD Max
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	95		78-111		
Batch number: 11020SLB026	Sample number(s): 6183546-6183557									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	95		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	85		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	89		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	91		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	113		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	116		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	123		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	118		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	99		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	104		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	91		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	132		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	93		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	91		70-130		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	96		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	93		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	128		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	84		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	78		62-120		
Naphthalene	0.67	U	0.67	1.7	ug/kg	84		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	78		39-148		
Di-n-octylphthalate	7.7	J	6.0	18	ug/kg	128		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	87		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	85		56-121		
Batch number: 110190027A	Sample number(s): 6183555-6183556									
2,4-D	1.2	U	1.2	3.6	ug/kg	88		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	76		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	76		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	70		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	5*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	94		60-141		
MCPA	76	U	76.	250	ug/kg	96		34-113		
MCPP (Mecoprop)	97	J	75.	250	ug/kg	92		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	90		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	76		48-138		
Batch number: 110200023A	Sample number(s): 6183557									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	106		85-115		
Batch number: 110170030A	Sample number(s): 6183546-6183557									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	67*	65*	75-125	2	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	99		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	122		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 110170031A	Sample number(s): 6183555-6183556									

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Aldrin	0.066 U	0.066	0.17	ug/kg	124		44-135		
Alpha BHC	0.034 U	0.034	0.17	ug/kg	85		38-130		
Beta BHC	0.060 U	0.060	0.17	ug/kg	88		56-134		
Gamma BHC - Lindane	0.034 U	0.034	0.17	ug/kg	88		46-127		
Chlordane	0.80 U	0.80	3.4	ug/kg					
p,p-DDD	0.066 U	0.066	0.34	ug/kg	96		60-137		
p,p-DDE	0.066 U	0.066	0.34	ug/kg	126		59-141		
p,p-DDT	0.066 U	0.066	0.34	ug/kg	86		54-130		
Delta BHC	0.036 U	0.036	0.17	ug/kg	91		55-144		
Dieldrin	0.066 U	0.066	0.34	ug/kg	92		65-129		
Endosulfan I	0.044 U	0.044	0.17	ug/kg	73		45-123		
Endosulfan II	0.066 U	0.066	0.34	ug/kg	105		63-127		
Endosulfan Sulfate	0.066 U	0.066	0.34	ug/kg	122		72-138		
Endrin	0.066 U	0.066	0.34	ug/kg	91		62-129		
Endrin Aldehyde	0.066 U	0.066	0.34	ug/kg	88		55-132		
Endrin Ketone	0.066 U	0.066	0.34	ug/kg	138		69-139		
Heptachlor	0.060 U	0.060	0.17	ug/kg	91		43-124		
Heptachlor Epoxide	0.034 U	0.034	0.17	ug/kg	124		65-131		
Methoxychlor	0.34 U	0.34	1.7	ug/kg	85		59-125		
Mirex	0.066 U	0.066	0.34	ug/kg					
Toxaphene	2.2 U	2.2	6.6	ug/kg					

Batch number: 110180016A	Sample number(s): 6183558-6183559								
Aroclor 5432	0.10 U	0.10	0.50	ug/l					
Aroclor 5442	0.10 U	0.10	0.50	ug/l	44*	46*	75-125	4	30
Aroclor 5460	0.10 U	0.10	0.50	ug/l					
PCB-1016	0.10 U	0.10	0.50	ug/l	106	98	68-119	8	30
PCB-1221	0.10 U	0.10	0.50	ug/l					
PCB-1232	0.20 U	0.20	0.50	ug/l					
PCB-1242	0.10 U	0.10	0.50	ug/l					
PCB-1248	0.10 U	0.10	0.50	ug/l					
PCB-1254	0.10 U	0.10	0.50	ug/l					
PCB-1260	0.10 U	0.10	0.50	ug/l	136*	120	68-121	13	30
PCB-1262	0.20 U	0.20	0.50	ug/l					
PCB-1268	0.16 U	0.16	0.50	ug/l					

Batch number: 110171848002	Sample number(s): 6183558-6183559								
Aluminum	0.0834 U	0.0834	0.200	mg/l	98	98	90-112	0	20
Boron	0.0138 U	0.0138	0.0500	mg/l	92	91	90-110	2	20
Calcium	0.0702 U	0.0702	0.200	mg/l	101	100	90-112	0	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	102	101	80-120	0	20
Magnesium	0.0172 U	0.0172	0.100	mg/l	95	94	89-110	0	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	103	102	90-110	0	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	97	96	80-120	1	20
Potassium	0.239 U	0.239	0.500	mg/l	99	98	85-115	1	20
Sodium	0.433 U	0.433	1.00	mg/l	100	99	87-114	1	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	100	98	90-110	2	20
Tin	0.0098 U	0.0098	0.0200	mg/l	98	98	90-110	1	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	102	101	90-113	1	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	102	101	80-120	0	20

Batch number: 110175713003	Sample number(s): 6183558-6183559								
Mercury	0.000050 U	0.00005	0.00020	mg/l	96	89	80-120	8	20

Batch number: 110176050002A	Sample number(s): 6183558-6183559								
Antimony	0.00030 U	0.00030	0.0010	mg/l	96	107	87-110	11	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	100	107	86-111	7	20

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Beryllium	0.00013 U	0.00013	0.00050	mg/l	109	111	90-112	1	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	95	105	90-114	9	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	107	109	90-118	2	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	106	107	80-120	1	20
Copper	0.00038 U	0.00038	0.0020	mg/l	110	110	90-113	0	20
Lead	0.000052 U	0.00005	0.0010	mg/l	106	106	90-115	0	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	107	106	90-113	1	20
Silver	0.000080 U	0.00008	0.00050	mg/l	101	100	90-115	1	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	104	100	89-116	4	20
Vanadium	0.00016 U	0.00016	0.00050	mg/l	104	106	80-120	2	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	114	106	80-120	8	20
Batch number: 110176050002B	Sample number(s): 6183558-6183559								
Selenium	0.00025 U	0.00025	0.0020	mg/l	100	102	85-114	2	20
Batch number: 110176050002C	Sample number(s): 6183558-6183559								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	100	100	80-120	0	20
Batch number: 110176050002D	Sample number(s): 6183558-6183559								
Barium	0.00053 U	0.00053	0.0020	mg/l	110	105	88-113	5	20
Batch number: 110191026001A	Sample number(s): 6183546-6183557								
Antimony	0.0600 U	0.0600	0.200	mg/kg	134		11-208		
Arsenic	0.0800 U	0.0800	0.400	mg/kg	99		80-120		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	105		82-118		
Cadmium	0.0400 U	0.0400	0.100	mg/kg	103		82-118		
Chromium	0.120 U	0.120	0.400	mg/kg	108		80-120		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	107		82-118		
Copper	0.0660 U	0.0660	0.400	mg/kg	104		80-120		
Lead	0.0104 U	0.0104	0.200	mg/kg	99		80-120		
Nickel	0.100 U	0.100	0.400	mg/kg	108		80-120		
Silver	0.0120 U	0.0120	0.100	mg/kg	98		66-134		
Thallium	0.0300 U	0.0300	0.100	mg/kg	102		81-119		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	98		90-110		
Zinc	0.560 U	0.560	3.00	mg/kg	100		78-122		
Batch number: 110191026001B	Sample number(s): 6183546-6183557								
Selenium	0.0400 U	0.0400	0.400	mg/kg	103		79-122		
Batch number: 110191026001C	Sample number(s): 6183546-6183557								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	107		78-122		
Batch number: 110191026001D	Sample number(s): 6183546-6183557								
Barium	0.108 U	0.108	0.400	mg/kg	101		79-121		
Batch number: 110195708001	Sample number(s): 6183546-6183557								
Aluminum	5.03 U	5.03	20.0	mg/kg	90		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	88		78-110		
Calcium	6.13 U	6.13	20.0	mg/kg	94		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	101		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	101		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	94		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	98		81-119		
Phosphorus	1.36 J	0.560	10.0	mg/kg	103		80-120		
Potassium	18.0 U	18.0	50.0	mg/kg	94		78-110		
Sodium	37.3 U	37.3	100	mg/kg	95		87-110		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Strontium	0.0620 U	0.0620	0.500	mg/kg	100		79-121		
Tin	1.00 U	1.00	10.0	mg/kg	102		90-114		
Titanium	0.380 U	0.380	1.00	mg/kg	94		80-120		
Zirconium	0.840 U	0.840	5.00	mg/kg	101		80-120		
Batch number: 110201848008	Sample number(s): 6183558-6183559								
Iron	0.0522 U	0.0522	0.200	mg/l	104	105	90-112	1	20
Batch number: 110215711003	Sample number(s): 6183546-6183557								
Mercury	0.0028 U	0.0028	0.0968	mg/kg	98		88-123		
Batch number: 11019196401B	Sample number(s): 6183558-6183559								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	103	105	90-110	1	20
Batch number: 11019621701A	Sample number(s): 6183558-6183559								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	91		85-115		
Batch number: 11020621201A	Sample number(s): 6183546-6183549								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	94		85-115		
Batch number: 11020621201B	Sample number(s): 6183550-6183557								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	94		85-115		
Batch number: 11025025203A	Sample number(s): 6183546-6183555								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	96		90-110		
Batch number: 11025025203B	Sample number(s): 6183556-6183557								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	96		90-110		
Batch number: 11025243202A	Sample number(s): 6183546-6183557								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	96		80-120		
Batch number: 11026196602A	Sample number(s): 6183558-6183559								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	106	105	90-110	1	20
Batch number: 11018039402A	Sample number(s): 6183546-6183549								
22a pH by 9045C					100		95-105		
Batch number: 11018039402B	Sample number(s): 6183550-6183557								
22a pH by 9045C					100		95-105		
Batch number: 11018182102A	Sample number(s): 6183546-6183549								
32a OR Potential					99		98-102		
Batch number: 11018182102B	Sample number(s): 6183550-6183557								
32a OR Potential					99		98-102		
Batch number: 11019162401A	Sample number(s): 6183546-6183549								
28a Moisture Content by 160.3					100		80-120		
Batch number: 11019162401B	Sample number(s): 6183550-6183557								
28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

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Quality Control Summary

Client Name: CDM Federal Programs Corp.

Group Number: 1229054

Reported: 02/08/11 at 01:21 PM

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B110172AA	Sample number(s): 6183546-6183547, 6183549, 6183551, 6183553-6183554, 6183557 UNSPK: 6183546								
Acetone	117		15-210						
Benzene	101		55-143						
Bromobenzene	94		43-139						
Bromochloromethane	106		60-137						
Bromodichloromethane	96		53-136						
Bromoform	103		38-124						
Bromomethane	64		42-168						
2-Butanone	94		37-163						
n-Butylbenzene	87		30-146						
sec-Butylbenzene	88		33-157						
tert-Butylbenzene	87		41-152						
Carbon Tetrachloride	105		45-153						
Chlorobenzene	101		49-135						
Chloroethane	63		39-152						
2-Chloroethyl Vinyl Ether	85		32-139						
Chloroform	101		61-142						
Chloromethane	81		51-163						
2-Chlorotoluene	92		42-146						
4-Chlorotoluene	91		39-145						
1,2-Dibromo-3-chloropropane	78		30-139						
Dibromochloromethane	101		51-128						
1,2-Dibromoethane	100		54-129						
Dibromomethane	101		57-130						
1,2-Dichlorobenzene	94		36-133						
1,3-Dichlorobenzene	92		34-134						
1,4-Dichlorobenzene	93		35-136						
Dichlorodifluoromethane	70		26-151						
1,1-Dichloroethane	98		63-142						
1,2-Dichloroethane	99		68-131						
1,1-Dichloroethene	103		61-149						
cis-1,2-Dichloroethene	103		60-136						
trans-1,2-Dichloroethene	103		59-142						
1,2-Dichloropropane	95		62-135						
1,3-Dichloropropane	95		58-129						
2,2-Dichloropropane	102		53-147						
1,1-Dichloropropene	97		54-145						
cis-1,3-Dichloropropene	86		51-131						
trans-1,3-Dichloropropene	87		49-129						
Ethylbenzene	95		44-141						
Freon 113	103		56-156						
Hexachlorobutadiene	84		10-155						
2-Hexanone	66		32-160						
Isopropylbenzene	93		38-144						
p-Isopropyltoluene	90		29-152						
Methyl Tertiary Butyl Ether	94		55-129						
4-Methyl-2-pentanone	64		46-139						
Methylene Chloride	94		61-141						
n-Propylbenzene	92		39-157						
Styrene	99		35-134						
1,1,1,2-Tetrachloroethane	106		52-130						
1,1,2,2-Tetrachloroethane	86		40-152						
Tetrachloroethene	107		42-149						

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Toluene	100		50-146						
1,2,3-Trichlorobenzene	82		10-140						
1,2,4-Trichlorobenzene	77		10-136						
1,1,1-Trichloroethane	100		64-142						
1,1,2-Trichloroethane	102		54-139						
Trichloroethene	100		53-144						
Trichlorofluoromethane	87		47-163						
1,2,3-Trichloropropane	92		45-154						
1,2,4-Trimethylbenzene	90		37-149						
1,3,5-Trimethylbenzene	90		38-150						
Vinyl Chloride	78		50-154						
m+p-Xylene	101		44-137						
o-Xylene	91		42-137						
Batch number: E110171AA Sample number(s): 6183546-6183547,6183549,6183551,6183553-6183554,6183557 UNSPK: P182855									
1,4-Dioxane	91	92	70-130	16	30				
Batch number: 11019SLA026 Sample number(s): 6183546-6183557 UNSPK: 6183546									
Aniline	70	74	14-114	5	30				
Benidine	27*	33*	35-141	19	30				
Benzoic acid	57	58	10-173	1	30				
Benzyl alcohol	94	96	55-123	2	30				
4-Bromophenyl-phenylether	90	93	67-129	3	30				
Carbazole	95	95	64-120	0	30				
4-Chloro-3-methylphenol	94	94	53-130	0	30				
4-Chloroaniline	54	59	23-95	9	30				
bis(2-Chloroethoxy)methane	91	90	54-117	1	30				
bis(2-Chloroethyl)ether	89	90	60-116	0	30				
bis(2-Chloroisopropyl)ether	90	87	55-142	3	30				
2-Chloronaphthalene	76	76	50-141	1	30				
2-Chlorophenol	97	96	73-121	1	30				
4-Chlorophenyl-phenylether	93	95	64-119	2	30				
Dibenzofuran	94	95	71-112	1	30				
1,2-Dichlorobenzene	86	85	66-108	1	30				
1,3-Dichlorobenzene	84	83	63-109	0	30				
1,4-Dichlorobenzene	84	83	53-113	1	30				
3,3'-Dichlorobenzidine	48	52	25-123	8	30				
2,4-Dichlorophenol	95	95	78-117	0	30				
2,4-Dimethylphenol	94	93	56-130	1	30				
3,5-Dimethylphenol	105	107	70-130	2	30				
4,6-Dinitro-2-methylphenol	83	81	10-148	3	30				
2,4-Dinitrophenol	70	66	20-143	6	30				
2,4-Dinitrotoluene	95	98	57-114	3	30				
2,6-Dinitrotoluene	96	97	69-123	1	30				
1,2-Diphenylhydrazine	96	98	71-129	2	30				
bis(2-Ethylhexyl)phthalate	92	93	63-122	0	30				
Hexachlorobenzene	90	92	61-111	2	30				
Hexachlorobutadiene	87	85	62-120	2	30				
Hexachlorocyclopentadiene	79	81	10-153	3	30				
Hexachloroethane	81	80	57-109	1	30				
Isophorone	91	91	51-118	0	30				
2-Methylphenol	98	98	47-142	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
4-Methylphenol	92	93	55-126	1	30				
2-Nitroaniline	96	98	67-125	1	30				
3-Nitroaniline	95	96	59-122	1	30				
4-Nitroaniline	79	77	52-112	3	30				
Nitrobenzene	90	90	51-114	1	30				
2-Nitrophenol	92	92	74-115	0	30				
4-Nitrophenol	79	77	39-133	2	30				
N-Nitroso-di-n-propylamine	91	91	60-116	1	30				
N-Nitrosodiphenylamine	93	95	86-145	3	30				
Di-n-octylphthalate	95	95	56-126	0	30				
Pentachlorophenol	87	85	17-149	1	30				
Phenol	95	97	58-126	2	30				
1,2,4-Trichlorobenzene	90	89	72-115	1	30				
2,4,5-Trichlorophenol	93	97	34-139	4	30				
2,4,6-Trichlorophenol	93	93	49-140	1	30				

Batch number: 11020SLB026	Sample number(s): 6183546-6183557 UNSPK: 6183546								
Acenaphthene	91	89	63-105	3	30				
Acenaphthylene	85	84	55-126	2	30				
Anthracene	89	90	46-136	2	30				
Benzo(a)anthracene	88	91	39-144	3	30				
Benzo(a)pyrene	108	114	34-156	5	30				
Benzo(b)fluoranthene	110	116	43-155	5	30				
Benzo(g,h,i)perylene	91	102	33-141	11	30				
Benzo(k)fluoranthene	111	117	42-144	5	30				
Butylbenzylphthalate	98	101	73-140	3	30				
Di-n-butylphthalate	99	103	78-160	4	30				
Chrysene	88	90	29-156	2	30				
Dibenz(a,h)anthracene	108	113	41-130	4	30				
Diethylphthalate	93	94	87-131	0	30				
Dimethylphthalate	92	90	74-118	2	30				
Fluoranthene	92	95	26-166	4	30				
Fluorene	93	91	45-121	2	30				
Indeno(1,2,3-cd)pyrene	104	108	21-143	4	30				
1-Methylnaphthalene	85	81	72-123	4	30				
2-Methylnaphthalene	77	73	28-121	5	30				
Naphthalene	83	81	61-102	3	30				
N-Nitrosodimethylamine	96	91	48-113	5	30				
Di-n-octylphthalate	102	107	40-192	4	30				
Phenanthrene	85	88	12-165	3	30				
Pyrene	81	83	15-153	2	30				

Batch number: 110190027A	Sample number(s): 6183555-6183556 UNSPK: 6183555								
2,4-D	90	57	28-161	45*	35				
Dalapon	47	33	12-86	34	50				
2,4-DB	123	0*	20-170	200*	50				
Dicamba	118	159*	33-120	30	50				
Dinoseb	22	17	1-44	21	35				
2,4-DP (Dichlorprop)	64	95	55-141	39	50				
MCPA	91	74	31-184	21	50				
MCPP (Mecoprop)	0*	0*	16-174	0	50				
2,4,5-T	59	95	25-132	47*	35				
2,4,5-TP	82	87	10-183	6	35				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 110200023A 6a Perchlorate EPA 6850	Sample number(s): 6183557 106	105	80-120	1	20	UNSPK: P182836			
Batch number: 110170030A PCB-1016 PCB-1260	Sample number(s): 6183546-6183557 81 117	85 116	29-146 39-149	4 1	50 50	UNSPK: 6183546			
Batch number: 110170031A Aldrin Alpha BHC Beta BHC Gamma BHC - Lindane p,p-DDD p,p-DDE p,p-DDT Delta BHC Dieldrin Endosulfan I Endosulfan II Endosulfan Sulfate Endrin Endrin Aldehyde Endrin Ketone Heptachlor Heptachlor Epoxide Methoxychlor	Sample number(s): 6183555-6183556 100 70 75 73 70 88 63 75 65 45 82 97 65 64 95 73 91 79	100 70 81 73 76 129 66 78 65 48 80 97 65 67 114 73 94 81	16-126 10-129 14-147 10-140 16-163 18-161 10-176 23-140 19-154 16-137 28-154 21-160 11-149 10-148 22-165 13-126 13-157 32-147	0 0 8 0 8 28 4 4 0 6 2 0 0 5 17 0 3 3	50 50 50 50 50 50 50 50 50 50 50 50 50 35 50 50 50 50				
Batch number: 110191026001A Antimony Arsenic Beryllium Cadmium Chromium Cobalt Copper Lead Nickel Silver Thallium Vanadium Zinc	Sample number(s): 6183546-6183557 34* 113 97 99 105 91 94 105 97 105 104 129* 98 (2)	33* 96 81 101 89 90 97 98 91 101 103 92 91 (2)	75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125 75-125	2 5 9 2 6 1 2 2 3 4 0 8 1	20 20 20 20 20 20 20 20 20 20 20 20 20	0.193 J 4.51 0.700 0.0829 J 17.3 5.30 6.55 6.17 10.7 0.0343 J 0.225 33.0 42.4	0.140 J 4.34 0.666 0.0965 J 17.4 4.93 6.93 5.73 10.6 0.0502 J 0.217 32.6 44.7	32* (1) 4 5 15 (1) 0 7 6 7 1 38* (1) 3 (1) 1 5	20 20 20 20 20 20 20 20 20 20 20 20 20
Batch number: 110191026001B Selenium	Sample number(s): 6183546-6183557 86	90	75-125	4	20	UNSPK: P182836 BKG: P182836			
Batch number: 110191026001C Molybdenum	Sample number(s): 6183546-6183557 103	97	75-125	5	20	UNSPK: P182836 BKG: P182836			
Batch number: 110191026001D Barium	Sample number(s): 6183546-6183557 174 (2)	34 (2)	75-125	13	20	UNSPK: P182836 BKG: P182836			
Batch number: 110195708001	Sample number(s): 6183546-6183557					UNSPK: P182836 BKG: P182836			

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup Max	RPD
Aluminum	2916 (2)	2165 (2)	75-125	7	20	19,700	18,600	6	20	
Boron	96	94	84-115	5	20	0.873 U	0.864 U	0 (1)	20	
Calcium	-191 (2)	-226 (2)	75-125	3	20	4,200	2,630	46*	20	
Iron	2136 (2)	1901 (2)	75-125	1	20	20,000	19,200	5	20	
Lithium	104	102	82-114	4	20	20.6	20.3	1	20	
Magnesium	292 (2)	253 (2)	75-125	2	20	3,770	3,650	3	20	
Manganese	158 (2)	98 (2)	75-125	11	20	229	234	2	20	
Phosphorus	101	114	75-125	3	20	180	185	3	20	
Potassium	135*	135*	75-125	1	20	1,700	1,920	12	20	
Sodium	97	97	75-125	3	20	189	153	21* (1)	20	
Strontium	97	95	75-115	4	20	26.3	22.5	16	20	
Tin	90	89	80-110	4	20	2.34 J	2.37 J	1 (1)	20	
Titanium	249 (2)	241 (2)	75-125	1	20	1,050	1,050	0	20	
Zirconium	97	96	75-125	3	20	2.68 J	2.96 J	10 (1)	20	
Batch number: 110215711003 Mercury	Sample number(s): 6183546-6183557 UNSPK: P182836 BKG: P182836 120 117 65-135 2 20 0.0262 J 0.0294 J 12 (1) 20									
Batch number: 11019621701A 7b Perchlorate EPA 314.0	Sample number(s): 6183558-6183559 UNSPK: P177278 BKG: P177278 96 80-120 0.70 U 0.70 U 0 (1) 15									
Batch number: 11020621201A 7a Perchlorate EPA 314.0	Sample number(s): 6183546-6183549 UNSPK: P182855 BKG: P182855 101 80-120 9.0 U 9.0 U 0 (1) 15									
Batch number: 11020621201B 7a Perchlorate EPA 314.0	Sample number(s): 6183550-6183557 UNSPK: 6183550 BKG: 6183550 105 80-120 9.0 U 9.0 U 0 (1) 15									
Batch number: 11025025203A 11a Anions by 300.0 - Fluoride	Sample number(s): 6183546-6183555 UNSPK: 6183546 BKG: 6183546 85 80-120 6.4 6.3 0 20									
Batch number: 11025025203B 11a Anions by 300.0 - Fluoride	Sample number(s): 6183556-6183557 UNSPK: 6183556 BKG: 6183556 79* 80-120 1.4 1.0 31* (1) 20									
Batch number: 11025243202A 3a Cr VI by EPA 7199	Sample number(s): 6183546-6183557 UNSPK: 6183551 BKG: 6183551 94 75-125 0.20 U 0.20 U 0 (1) 20									
Batch number: 11018039402A 22a pH by 9045C	Sample number(s): 6183546-6183549 BKG: P182859 7.25 7.25 0 1									
Batch number: 11018039402B 22a pH by 9045C	Sample number(s): 6183550-6183557 BKG: 6183550 6.81 6.80 0 1									
Batch number: 11018182102A 32a OR Potential	Sample number(s): 6183546-6183549 BKG: P182859 390 390 0 6									
Batch number: 11018182102B 32a OR Potential	Sample number(s): 6183550-6183557 BKG: 6183550 348 348 0 6									
Batch number: 11019162401A 28a Moisture Content by 160.3	Sample number(s): 6183546-6183549 BKG: 6183549 13.8 13.9 1 20									

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11019162401B 28a Moisture Content by 160.3									
Sample number(s): 6183550-6183557						BKG: 6183552 23.0	22.7	1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B

Batch number: B110172AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6183546	112	113	95	88
6183547	110	106	96	85
6183549	111	105	96	82
6183551	109	106	97	85
6183553	111	107	94	85
6183554	113	109	95	85
6183557	111	105	95	85
Blank	108	107	95	85
LCS	103	107	101	101
LCSD	102	108	101	100
MS	103	107	101	100

Limits: 80-120 80-120 81-117 74-121

Analysis Name: 14a 1,4-Dioxane by 8260B SIM

Batch number: E110171AA

	Toluene-d8
6183546	98
6183547	99
6183549	99
6183551	99
6183553	98
6183554	99
6183557	99
Blank	99
LCS	100
LCSD	100
MS	99
MSD	99

Limits: 70-130

Analysis Name: 14b 1,4-Dioxane by 8260B SIM

Batch number: E110191AA

Toluene-d8

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Surrogate Quality Control

6183560 101
Blank 100
LCS 100
LCSD 100

Limits: 80-120

Analysis Name: 1b Volatile Organics EPA8260

Batch number: Y110141AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6183560	107	100	98	98
Blank	104	98	99	100
LCS	106	102	100	102
LCSD	106	105	100	102

Limits: 86-118 80-120 88-110 86-115

Analysis Name: 4b Select SVOC EPA 8270SIM

Batch number: 11017WAD026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6183558	126	90	98
6183559	131	89	91
Blank	88	90	93
LCS	114	95	94
LCSD	103	95	93

Limits: 40-130 45-130 45-135

Analysis Name: 5b Semivolatiles by EPA 8270C

Batch number: 11018WAA026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6183558	51	32	94	87	88	92
6183559	48	31	91	83	88	89
Blank	42	25	86	81	83	82
LCS	52	32	95	92	95	91
LCSD	60	39	95	91	95	92

Limits: 20-130 20-120 30-130 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 11019SLA026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6183546	90	89	89	85	87	81
6183547	84	84	86	79	81	83
6183548	92	91	93	87	90	87
6183549	86	84	89	79	82	83
6183550	85	84	83	79	81	82
6183551	92	90	88	84	85	88
6183552	86	85	85	78	80	86
6183553	91	89	92	86	89	88
6183554	87	87	87	81	83	84
6183555	91	91	87	86	91	95
6183556	87	84	91	80	85	93

*- Outside of specification

**.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Surrogate Quality Control

6183557	87	86	83	83	85	89
Blank	94	94	96	88	89	86
LCS	93	93	92	88	91	85
MS	94	94	93	87	90	86
MSD	95	93	94	86	92	88

Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11020SLB026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6183546	87	82	93
6183547	95	82	92
6183548	87	79	83
6183549	92	86	85
6183550	96	87	88
6183551	92	85	84
6183552	101	88	83
6183553	88	84	87
6183554	95	87	87
6183555	110	93	117
6183556	106	88	90
6183557	89	81	89
Blank	84	83	90
LCS	100	86	86
MS	116	88	85
MSD	101	82	84

Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 110170030A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6183546	82	112
6183547	92	111
6183548	87	106
6183549	91	120
6183550	104	138*
6183551	101	128*
6183552	75	108
6183553	91	131*
6183554	88	135*
6183555	87	146*
6183556	88	152*
6183557	90	140*
Blank	112	126*
LCS	119	118
LCSD	100	114
MS	92	129*
MSD	101	131*

Limits:	53-139	45-120

Analysis Name: 12a Pesticides by 8081A
Batch number: 110170031A

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/08/11 at 01:21 PM

Group Number: 1229054

Surrogate Quality Control

	Tetrachloro-m-xylene	Decachlorobiphenyl
6183555	36*	22
6183556	71	74
Blank	91	105
LCS	92	106
MS	83	74
MSD	91	82

Limits: 50-130 20-120

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 110180016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6183558	95	91
6183559	85	84
Blank	86	80
LCS	103	93
LCSD	100	110

Limits: 30-150 45-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 110190027A

2,4-Dichlorophenylacetic
acid

6183555	86
6183556	98
Blank	86
LCS	86
MS	82
MSD	79

Limits: 36-156

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

13013

1229054

6183546-60

CHAIN OF CUSTODY RECORD

SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS										SS ONLY		VOCs		SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
CDM	NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP					Nitrate EPA 8210/8208/8211A	Fluoride EPA 300.0	SVOs EPA 8270C & PAHs 8270 SIM	PCBs EPA 8082	Dioxin/Furan EPA 1631B	Perchlorate EPA 314.0	Hex Chrome EPA 7160 [®]	Particulate Confirmation by EPA 8860 (10%)	Pesticides EPA 8261A (surface soil only)	Herbicides EPA 8151 (surface soil only)	VOCs EPA 8260B	1,4-Dioxane EPA 8263SIM	TPH-GRO EPA 8015B	pH EPA 8045C	**TPH-EPA EPA 8015B Mod.	**Nitrate EPA 300.0	**Formaldehyde EPA 8315A	**NDMA EPA 1625C	**Emergence EPA 8330A	**Cyanide EPA 8012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B		
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																									
SL-073-SA5B-SB-4.0-5.0	01.13.1	1231	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																		
SL-073-SA5B-SB-4.5	01.13.1	1227	SOIL	NONE	4 ENCORES											X	X													
SL-301-SA5B-SB-4.0-5.0	01.13.1	0945	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																		
SL-301-SA5B-SB-4.5	01.13.1	0941	SOIL	NONE	4 ENCORES											X	X													
SL-301-SA5B-SB-7.5-8.5	01.13.1	0948	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																		
SL-074-SA5B-SB-4.0-5.0	01.13.1	1111	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																		
SL-074-SA5B-SB-4.5	01.13.1	1109	SOIL	NONE	4 ENCORES											X	X													
SL-074-SA5B-SB-7.0-8.0	01.13.1	1116	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																		
SL-121-SA5B-SB-4.0-5.0	01.13.1	1022	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																		
SL-121-SA5B-SB-4.5	01.13.1	1018	SOIL	NONE	4 ENCORES											X	X													
SL-121-SA5B-SB-9.0-10.0	01.13.1	1027	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																		
SL-120-SA5B-SB-3.0-4.0	01.13.1	1125	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																		
SL-120-SA5B-SB-3.5	01.13.1	1120	SOIL	NONE	4 ENCORES											X	X													
SL-119-SA5B-SB-3.0-4.0	01.13.1	0853	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																		
SL-119-SA5B-SB-3.5	01.13.1	0849	SOIL	NONE	4 ENCORES											X	X													
SED-009-SIV-SD-0.0-0.5	01.13.1	0945	SOIL	NONE	1 16 oz. jar & 1 6" sleeve	X	X	X	X	X	X	X		X	X															
SED-028-SIV-SD-0.0-0.5	01.13.1	1115	SOIL	NONE	1 16 oz. jar & 1 6" sleeve	X	X	X	X	X	X	X		X	X															
SL-122-SA5B-SB-2.0-3.0	01.13.1	1339	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X	X																	
SL-122-SA5B-SB-2.5	01.13.1	1334	SOIL	NONE	4 ENCORES											X	X													
EB20-SA5B-011311	01.13.1	1300	WATER	NONE	4 1L AMBER BOTTLES			X	X	X																				
EB20-SA5B-011311	01.13.1	1300	WATER	NONE	1 - 500 mL POLY		X				X	X																		
EB20-SA5B-011311	01.13.1	1300	WATER	HNO3	1 - 500 mL POLY	X																								
EB21-SA5B-011311	01.13.1	1155	WATER	NONE	4 1L AMBER BOTTLES			X	X	X																				
EB21-SA5B-011311	01.13.1	1155	WATER	NONE	1 - 500 mL POLY		X				X	X																		
EB21-SA5B-011311	01.13.1	1155	WATER	HNO3	1 - 500 mL POLY	X																								
TB-011311	01.13.1	0800	WATER	HCl	3-40 mL VOA VIALS											X	X													

Received by: (Signature) <i>[Signature]</i>	Date/Time 1/13/2011, 17:00	Received for Laboratory by: (Signature) <i>[Signature]</i>	Date/Time 1/14/11 845
Recorded by: (Signature) <i>[Signature]</i>	Date/Time 1/13/2011, 17:00	Airbill No. (s) 9095 1431 9917, ..., 9028, ..., 9939	

Laboratory:
Lancaster Laboratories, Inc.

No. of coolers = 3

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

March 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 01/14/2011

Group Number: 1229059

SDG: DX038

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-121-SA5B-SB-4.0-5.0 Soil	6183573
SL-121-SA5B-SB-9.0-10.0 Soil	6183574
SL-120-SA5B-SB-3.0-4.0 Soil	6183575
SL-119-SA5B-SB-3.0-4.0 Soil	6183576
SED-009-SIV-SD-0.0-0.5 Sediment	6183577
SED-028-SIV-SD-0.0-0.5 Sediment	6183578
SL-122-SA5B-SB-2.0-3.0 Soil	6183579
EB20-SA5B-011311 Water	6183580
EB21-SA5B-011311 Water	6183581

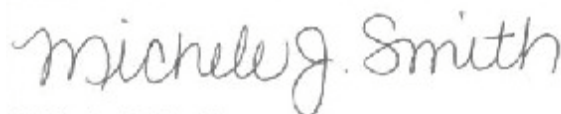
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgesser

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183573
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

D1214 SDG#: DX038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	7.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183573
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

D1214 SDG#: DX038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0336 U	0.0336	1.08	1
11031	12378-PeCDD	40321-76-4	0.0256 U	0.0256	5.41	1
11031	123478-HxCDD	39227-28-6	0.0209 U	0.0209	5.41	1
11031	123678-HxCDD	57653-85-7	0.0269 JQ	0.0215	5.41	1
11031	123789-HxCDD	19408-74-3	0.142 J	0.0211	5.41	1
11031	1234678-HpCDD	35822-46-9	0.218 JBQ	0.0304	5.41	1
11031	OCDD	3268-87-9	1.12 JB	0.0325	10.8	1
11031	2378-TCDF	51207-31-9	0.0332 U	0.0332	1.08	1
11031	12378-PeCDF	57117-41-6	0.0150 U	0.0150	5.41	1
11031	23478-PeCDF	57117-31-4	0.0329 JQ	0.0148	5.41	1
11031	123478-HxCDF	70648-26-9	0.0285 JB	0.0137	5.41	1
11031	123678-HxCDF	57117-44-9	0.0201 JBQ	0.0123	5.41	1
11031	123789-HxCDF	72918-21-9	0.133 JBQ	0.0137	5.41	1
11031	234678-HxCDF	60851-34-5	0.0357 JB	0.0125	5.41	1
11031	1234678-HpCDF	67562-39-4	0.106 JBQ	0.0111	5.41	1
11031	1234789-HpCDF	55673-89-7	0.0261 JBQ	0.0162	5.41	1
11031	OCDF	39001-02-0	0.131 JBQ	0.0402	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	77	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183573
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

D1214 SDG#: DX038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183573
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

D1214 SDG#: DX038-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 14:06	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183574
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

D1219 SDG#: DX038-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	23.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183574
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

D1219 SDG#: DX038-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0640 U	0.0640	1.30	1
11031	12378-PeCDD	40321-76-4	0.0708 JQ	0.0500	6.49	1
11031	123478-HxCDD	39227-28-6	0.0465 U	0.0465	6.49	1
11031	123678-HxCDD	57653-85-7	0.0730 JQ	0.0494	6.49	1
11031	123789-HxCDD	19408-74-3	0.0733 JQ	0.0473	6.49	1
11031	1234678-HpCDD	35822-46-9	0.369 JBQ	0.0639	6.49	1
11031	OCDD	3268-87-9	0.943 JB	0.0394	13.0	1
11031	2378-TCDF	51207-31-9	0.0619 U	0.0619	1.30	1
11031	12378-PeCDF	57117-41-6	0.0284 U	0.0284	6.49	1
11031	23478-PeCDF	57117-31-4	0.0657 JQ	0.0270	6.49	1
11031	123478-HxCDF	70648-26-9	0.0226 U	0.0226	6.49	1
11031	123678-HxCDF	57117-44-9	0.0525 JB	0.0204	6.49	1
11031	123789-HxCDF	72918-21-9	0.0390 JBQ	0.0239	6.49	1
11031	234678-HxCDF	60851-34-5	0.0354 JBQ	0.0210	6.49	1
11031	1234678-HpCDF	67562-39-4	0.124 JB	0.0195	6.49	1
11031	1234789-HpCDF	55673-89-7	0.0386 JBQ	0.0270	6.49	1
11031	OCDF	39001-02-0	0.158 JB	0.0629	13.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	84	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183574
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

D1219 SDG#: DX038-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183574
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

D1219 SDG#: DX038-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 15:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1



Analysis Report

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Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183575
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS120 SDG#: DX038-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183575
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS120 SDG#: DX038-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0446 U	0.0446	1.10	1
11031	12378-PeCDD	40321-76-4	0.0551 JQ	0.0442	5.49	1
11031	123478-HxCDD	39227-28-6	0.0421 JQ	0.0338	5.49	1
11031	123678-HxCDD	57653-85-7	0.0544 JQ	0.0366	5.49	1
11031	123789-HxCDD	19408-74-3	0.0957 JQ	0.0348	5.49	1
11031	1234678-HpCDD	35822-46-9	0.295 JB	0.0420	5.49	1
11031	OCDD	3268-87-9	0.757 JB	0.0338	11.0	1
11031	2378-TCDF	51207-31-9	0.0411 U	0.0411	1.10	1
11031	12378-PeCDF	57117-41-6	0.0322 JQ	0.0195	5.49	1
11031	23478-PeCDF	57117-31-4	0.0688 JQ	0.0200	5.49	1
11031	123478-HxCDF	70648-26-9	0.0429 JBQ	0.0184	5.49	1
11031	123678-HxCDF	57117-44-9	0.0319 JBQ	0.0161	5.49	1
11031	123789-HxCDF	72918-21-9	0.0354 JB	0.0188	5.49	1
11031	234678-HxCDF	60851-34-5	0.0440 JB	0.0173	5.49	1
11031	1234678-HpCDF	67562-39-4	0.122 JBQ	0.0150	5.49	1
11031	1234789-HpCDF	55673-89-7	0.0263 JBQ	0.0212	5.49	1
11031	OCDF	39001-02-0	0.201 JB	0.0532	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	90	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	81	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183575
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS120 SDG#: DX038-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183575
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS120 SDG#: DX038-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 19:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1



Analysis Report

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Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183576
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS119 SDG#: DX038-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183576
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS119 SDG#: DX038-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0425 U	0.0425	1.13	1
11031	12378-PeCDD	40321-76-4	0.0336 U	0.0336	5.63	1
11031	123478-HxCDD	39227-28-6	0.0265 U	0.0265	5.63	1
11031	123678-HxCDD	57653-85-7	0.0347 JQ	0.0261	5.63	1
11031	123789-HxCDD	19408-74-3	0.0680 JQ	0.0273	5.63	1
11031	1234678-HpCDD	35822-46-9	0.214 JBQ	0.0410	5.63	1
11031	OCDD	3268-87-9	0.808 JB	0.0343	11.3	1
11031	2378-TCDF	51207-31-9	0.0393 U	0.0393	1.13	1
11031	12378-PeCDF	57117-41-6	0.0519 JQ	0.0197	5.63	1
11031	23478-PeCDF	57117-31-4	0.0930 JQ	0.0186	5.63	1
11031	123478-HxCDF	70648-26-9	0.0376 JBQ	0.0186	5.63	1
11031	123678-HxCDF	57117-44-9	0.0324 JBQ	0.0164	5.63	1
11031	123789-HxCDF	72918-21-9	0.0460 JBQ	0.0186	5.63	1
11031	234678-HxCDF	60851-34-5	0.0483 JB	0.0179	5.63	1
11031	1234678-HpCDF	67562-39-4	0.126 JB	0.0125	5.63	1
11031	1234789-HpCDF	55673-89-7	0.0176 U	0.0176	5.63	1
11031	OCDF	39001-02-0	0.238 JBQ	0.0453	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	76	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183576
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS119 SDG#: DX038-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183576
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS119 SDG#: DX038-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 19:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183577
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DD009 SDG#: DX038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	23.5	0.50	0.50	1

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183577
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DD009 SDG#: DX038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0507 U	0.0507	1.31	1
11031	12378-PeCDD	40321-76-4	0.245 JQ	0.0590	6.54	1
11031	123478-HxCDD	39227-28-6	0.183 JQ	0.0590	6.54	1
11031	123678-HxCDD	57653-85-7	0.490 JQ	0.0620	6.54	1
11031	123789-HxCDD	19408-74-3	0.354 JQ	0.0575	6.54	1
11031	1234678-HpCDD	35822-46-9	7.27 B	0.0629	6.54	1
11031	OCDD	3268-87-9	54.6 B	0.0522	13.1	1
11031	2378-TCDF	51207-31-9	0.338 JQ	0.162	1.31	1
11031	12378-PeCDF	57117-41-6	0.618 J	0.0618	6.54	1
11031	23478-PeCDF	57117-31-4	0.956 J	0.0582	6.54	1
11031	123478-HxCDF	70648-26-9	0.531 JBQ	0.0460	6.54	1
11031	123678-HxCDF	57117-44-9	0.282 JBQ	0.0401	6.54	1
11031	123789-HxCDF	72918-21-9	0.0676 JBQ	0.0452	6.54	1
11031	234678-HxCDF	60851-34-5	0.275 JBQ	0.0405	6.54	1
11031	1234678-HpCDF	67562-39-4	1.52 JB	0.0378	6.54	1
11031	1234789-HpCDF	55673-89-7	0.158 JB	0.0489	6.54	1
11031	OCDF	39001-02-0	2.84 JB	0.0610	13.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	93	25 - 164
13C12-12378-PeCDD	101	25 - 181
13C12-123478-HxCDD	94	32 - 141
13C12-123678-HxCDD	95	28 - 130
13C12-123789-HxCDD	97	28 - 130
13C12-1234678-HpCDD	103	23 - 140
13C12-OCDD	103	17 - 157
13C12-2378-TCDF	93	24 - 169
13C12-12378-PeCDF	104	24 - 185
13C12-23478-PeCDF	105	21 - 178
13C12-123478-HxCDF	88	26 - 152
13C12-123678-HxCDF	97	26 - 123
13C12-234678-HxCDF	96	28 - 136
13C12-123789-HxCDF	104	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	101	26 - 138
13C12-OCDF	98	17 - 157
13C12-1278-TCDD (CRS)	105	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183577
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DD009 SDG#: DX038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183577
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DD009 SDG#: DX038-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 20:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183578
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DD028 SDG#: DX038-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	29.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183578
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DD028 SDG#: DX038-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0460 U	0.0460	1.42	1
11031	12378-PeCDD	40321-76-4	0.0453 U	0.0453	7.08	1
11031	123478-HxCDD	39227-28-6	0.123 J	0.0441	7.08	1
11031	123678-HxCDD	57653-85-7	0.226 J	0.0443	7.08	1
11031	123789-HxCDD	19408-74-3	0.156 J	0.0452	7.08	1
11031	1234678-HpCDD	35822-46-9	2.91 JB	0.0559	7.08	1
11031	OCDD	3268-87-9	31.3 B	0.0508	14.2	1
11031	2378-TCDF	51207-31-9	0.0948 J	0.0707	1.42	1
11031	12378-PeCDF	57117-41-6	0.206 J	0.0320	7.08	1
11031	23478-PeCDF	57117-31-4	0.266 JQ	0.0313	7.08	1
11031	123478-HxCDF	70648-26-9	0.163 JBQ	0.0303	7.08	1
11031	123678-HxCDF	57117-44-9	0.0995 JBQ	0.0266	7.08	1
11031	123789-HxCDF	72918-21-9	0.0317 U	0.0317	7.08	1
11031	234678-HxCDF	60851-34-5	0.137 JBQ	0.0279	7.08	1
11031	1234678-HpCDF	67562-39-4	0.663 JB	0.0235	7.08	1
11031	1234789-HpCDF	55673-89-7	0.0991 JBQ	0.0343	7.08	1
11031	OCDF	39001-02-0	1.72 JB	0.0690	14.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	97	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	93	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	87	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	91	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	77	17 - 157
13C12-1278-TCDD (CRS)	92	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183578
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DD028 SDG#: DX038-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183578
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 01/14/2011 08:45

Suite 210

Reported: 03/01/2011 19:49

Chantilly VA 20151

DD028 SDG#: DX038-17

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 21:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183579
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS122 SDG#: DX038-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183579
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS122 SDG#: DX038-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0534 U	0.0534	1.16	1
11031	12378-PeCDD	40321-76-4	0.0513 JQ	0.0388	5.79	1
11031	123478-HxCDD	39227-28-6	0.0468 U	0.0468	5.79	1
11031	123678-HxCDD	57653-85-7	0.466 JQ	0.0468	5.79	1
11031	123789-HxCDD	19408-74-3	0.560 JQ	0.0446	5.79	1
11031	1234678-HpCDD	35822-46-9	0.411 JBQ	0.0571	5.79	1
11031	OCDD	3268-87-9	4.24 JB	0.0490	11.6	1
11031	2378-TCDF	51207-31-9	0.0414 U	0.0414	1.16	1
11031	12378-PeCDF	57117-41-6	0.0200 U	0.0200	5.79	1
11031	23478-PeCDF	57117-31-4	0.0554 JQ	0.0195	5.79	1
11031	123478-HxCDF	70648-26-9	0.0370 JBQ	0.0226	5.79	1
11031	123678-HxCDF	57117-44-9	0.121 JBQ	0.0196	5.79	1
11031	123789-HxCDF	72918-21-9	0.105 JB	0.0238	5.79	1
11031	234678-HxCDF	60851-34-5	0.0221 JBQ	0.0202	5.79	1
11031	1234678-HpCDF	67562-39-4	0.124 JB	0.0138	5.79	1
11031	1234789-HpCDF	55673-89-7	0.0358 JB	0.0212	5.79	1
11031	OCDF	39001-02-0	0.418 JB	0.0530	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183579
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DS122 SDG#: DX038-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183579
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 01/14/2011 08:45

Suite 210

Reported: 03/01/2011 19:49

Chantilly VA 20151

DS122 SDG#: DX038-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 22:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183580
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DEB20 SDG#: DX038-19EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.241 U	0.241	2.17	1
10915	12378-PeCDD	40321-76-4	0.271 U	0.271	10.9	1
10915	123478-HxCDD	39227-28-6	0.167 JBQ	0.145	10.9	1
10915	123678-HxCDD	57653-85-7	0.509 JBQ	0.150	10.9	1
10915	123789-HxCDD	19408-74-3	0.189 JQ	0.143	10.9	1
10915	1234678-HpCDD	35822-46-9	2.25 JB	0.287	10.9	1
10915	OCDD	3268-87-9	5.27 JB	0.306	21.7	1
10915	2378-TCDF	51207-31-9	0.174 U	0.174	2.17	1
10915	12378-PeCDF	57117-41-6	0.132 JBQ	0.0897	10.9	1
10915	23478-PeCDF	57117-31-4	0.481 JBQ	0.0832	10.9	1
10915	123478-HxCDF	70648-26-9	0.640 JBQ	0.158	10.9	1
10915	123678-HxCDF	57117-44-9	0.378 JBQ	0.145	10.9	1
10915	123789-HxCDF	72918-21-9	0.152 U	0.152	10.9	1
10915	234678-HxCDF	60851-34-5	0.725 JB	0.138	10.9	1
10915	1234678-HpCDF	67562-39-4	3.35 JB	0.147	10.9	1
10915	1234789-HpCDF	55673-89-7	0.385 JBQ	0.180	10.9	1
10915	OCDF	39001-02-0	2.41 JB	0.293	21.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	88	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183580
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DEB20 SDG#: DX038-19EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11025002	02/02/2011 22:52	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	11025002	01/26/2011 05:55	Ginelle L Haines	1

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183581
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DEB21 SDG#: DX038-20EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.235 U	0.235	2.03	1
10915	12378-PeCDD	40321-76-4	0.270 U	0.270	10.2	1
10915	123478-HxCDD	39227-28-6	0.175 U	0.175	10.2	1
10915	123678-HxCDD	57653-85-7	0.180 U	0.180	10.2	1
10915	123789-HxCDD	19408-74-3	0.360 JQ	0.177	10.2	1
10915	1234678-HpCDD	35822-46-9	1.75 JBQ	0.319	10.2	1
10915	OCDD	3268-87-9	4.78 JB	0.387	20.3	1
10915	2378-TCDF	51207-31-9	0.170 U	0.170	2.03	1
10915	12378-PeCDF	57117-41-6	0.173 JBQ	0.103	10.2	1
10915	23478-PeCDF	57117-31-4	0.660 JBQ	0.0953	10.2	1
10915	123478-HxCDF	70648-26-9	0.477 JBQ	0.149	10.2	1
10915	123678-HxCDF	57117-44-9	0.581 JBQ	0.141	10.2	1
10915	123789-HxCDF	72918-21-9	0.313 JBQ	0.150	10.2	1
10915	234678-HxCDF	60851-34-5	0.656 JBQ	0.134	10.2	1
10915	1234678-HpCDF	67562-39-4	3.69 JBQ	0.144	10.2	1
10915	1234789-HpCDF	55673-89-7	0.282 JBQ	0.160	10.2	1
10915	OCDF	39001-02-0	2.42 JBQ	0.302	20.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	64	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	64	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	84	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183581
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 01/14/2011 08:45

Reported: 03/01/2011 19:49

DEB21 SDG#: DX038-20EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11025002	02/02/2011 23:49	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	11025002	01/26/2011 05:55	Ginelle L Haines	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/01/11 at 07:49 PM

Group Number: 1229059

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11019162401B 28a Moisture Content by 160.3	Sample number(s): 6183573-6183579				100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11025002	Sample number(s): 6183580-6183581								
2378-TCDD	0.212 U	0.212	2.00	pg/l	100		67-158		
12378-PeCDD	0.265 J	0.231	10.0	pg/l	104		70-142		
123478-HxCDD	0.161 J	0.140	10.0	pg/l	107		70-164		
123678-HxCDD	0.155 J	0.148	10.0	pg/l	106		76-134		
123789-HxCDD	0.146 U	0.146	10.0	pg/l	106		64-162		
1234678-HpCDD	1.97 J	0.274	10.0	pg/l	111		70-140		
OCDD	4.75 J	0.252	20.0	pg/l	117		78-144		
2378-TCDF	0.291 J	0.168	2.00	pg/l	107		75-158		
12378-PeCDF	0.284 J	0.0732	10.0	pg/l	106		80-134		
23478-PeCDF	0.530 J	0.0682	10.0	pg/l	105		68-160		
123478-HxCDF	0.784 J	0.122	10.0	pg/l	111		72-134		
123678-HxCDF	0.463 J	0.112	10.0	pg/l	108		84-130		
123789-HxCDF	0.178 J	0.123	10.0	pg/l	108		78-130		
234678-HxCDF	0.865 J	0.110	10.0	pg/l	109		70-156		
1234678-HpCDF	3.23 J	0.136	10.0	pg/l	113		82-122		
1234789-HpCDF	0.279 J	0.162	10.0	pg/l	113		78-138		
OCDF	2.06 J	0.262	20.0	pg/l	118		63-170		

Batch number: 11026001	Sample number(s): 6183573-6183579								
2378-TCDD	0.0468 U	0.0468	1.00	ng/kg	91		67-158		
12378-PeCDD	0.0442 U	0.0442	5.00	ng/kg	95		70-142		
123478-HxCDD	0.0330 U	0.0330	5.00	ng/kg	90		70-164		
123678-HxCDD	0.0335 U	0.0335	5.00	ng/kg	94		76-134		
123789-HxCDD	0.0310 U	0.0310	5.00	ng/kg	88		64-162		
1234678-HpCDD	0.231 J	0.0445	5.00	ng/kg	92		70-140		
OCDD	0.604 J	0.0380	10.0	ng/kg	91		78-144		
2378-TCDF	0.0493 U	0.0493	1.00	ng/kg	99		75-158		
12378-PeCDF	0.0235 U	0.0235	5.00	ng/kg	93		80-134		
23478-PeCDF	0.0240 U	0.0240	5.00	ng/kg	94		68-160		
123478-HxCDF	0.0920 J	0.0277	5.00	ng/kg	92		72-134		
123678-HxCDF	0.0350 J	0.0216	5.00	ng/kg	91		84-130		
123789-HxCDF	0.0311 J	0.0260	5.00	ng/kg	91		78-130		
234678-HxCDF	0.0717 J	0.0249	5.00	ng/kg	92		70-156		
1234678-HpCDF	0.285 J	0.0192	5.00	ng/kg	92		82-122		
1234789-HpCDF	0.0343 J	0.0273	5.00	ng/kg	92		78-138		
OCDF	0.323 J	0.0569	10.0	ng/kg	93		63-170		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/01/11 at 07:49 PM

Group Number: 1229059

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11019162401B 28a Moisture Content by 160.3									
Sample number(s): 6183573-6183579						BKG: P183552 23.0	22.7	1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11025002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6183580	73	79	73	77	78	78
6183581	65	69	65	67	68	70
Blank	77	86	83	85	87	88
OPR	76	82	78	84	82	87
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6183580	74	71	73	88	75	73
6183581	64	68	73	84	64	64
Blank	84	86	89	98	83	82
OPR	83	87	96	93	78	77
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6183580	73	73	71	76	77	79
6183581	64	63	64	67	69	68
Blank	82	81	82	87	83	89
OPR	78	78	81	89	79	83
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11026001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6183573	70	82	74	80	77	83
6183574	66	78	70	76	73	77
6183575	76	85	75	86	81	88
6183576	70	84	72	78	75	84
6183577	93	105	88	97	96	104
6183578	83	91	79	87	83	88
6183579	66	75	71	78	76	78

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/01/11 at 07:49 PM

Group Number: 1229059

Surrogate Quality Control

Blank	76	76	69	85	75	83
OPR	62	71	58	69	67	71
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6183573	91	78	77	87	85	79
6183574	81	76	73	84	79	74
6183575	93	83	81	91	85	83
6183576	87	79	76	91	83	76
6183577	101	101	98	105	101	94
6183578	98	84	77	92	97	90
6183579	90	76	72	81	84	78
Blank	93	81	81	91	79	80
OPR	76	71	68	78	74	71
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6183573	80	79	85	83	71	85
6183574	74	74	79	79	68	78
6183575	81	84	88	90	76	90
6183576	77	75	81	83	70	85
6183577	95	97	103	103	93	104
6183578	93	88	90	89	87	95
6183579	82	81	82	80	66	78
Blank	81	84	91	93	71	85
OPR	71	71	77	75	64	72
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

6183573-81

AND 1/14/11

CHAIN OF CUSTODY RECORD

AND 1/14/11

SSFL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD										Other Instructions and Notes													
CDM						PRIMARY FOR ALL LOCATIONS					SS ONLY		VOCs		SECONDARY FOR ALL LOCATIONS														
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP																													
Samplers Signature: <i>[Signature]</i>																													
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	Metal EPA 8010/8060/821.1	Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs EPA 8062	Drugs/Fats EPA 1631	Pesticides EPA 314.0	Hex Chrome EPA 7198	Pesticides Confirmation by EPA 8062 (10%)	Phthalates EPA 8061A (surface soil only)	Phthalates EPA 8151 (surface soil only)	VOCs EPA 8260B	4-Dioxins EPA 8260SM	TPH-GRG EPA 8015B	TPH EPA 8040C	TPH-EPA EPA 8015B Mod.	Nitrate EPA 300.0	Formaldehyde EPA 8315A	NONA EPA 1255C	Emeralds EPA 8330A	Cyanide EPA 8012B	Technique EPA 8015B	Glycols EPA 8015B	Monoaroma EPA 8015B	
SL-073-SASB-SB-4.0-5.0	01.13.1	1231	SOIL	NONE	2 16 oz. jars																								
SL-073-SASB-SB-4.5	01.13.1	1227	SOIL	NONE	4 ENCORES																								
SL-301-SASB-SB-4.0-5.0	01.13.1	0945	SOIL	NONE	2 16 oz. jars																								
SL-301-SASB-SB-4.5	01.13.1	0941	SOIL	NONE	4 ENCORES																								
SL-301-SASB-SB-7.5-8.5	01.13.1	0948	SOIL	NONE	2 16 oz. jars																								
SL-074-SASB-SB-4.0-5.0	01.13.1	1711	SOIL	NONE	2 16 oz. jars																								
SL-074-SASB-SB-4.5	01.13.1	1108	SOIL	NONE	4 ENCORES																								
SL-074-SASB-SB-7.0-8.0	01.13.1	1118	SOIL	NONE	2 16 oz. jars																								
SL-121-SASB-SB-4.0-5.0	01.13.1	1022	SOIL	NONE	2 16 oz. jars																								
SL-121-SASB-SB-4.5	01.13.1	1018	SOIL	NONE	4 ENCORES																								
SL-121-SASB-SB-9.0-10.0	01.13.1	1027	SOIL	NONE	2 16 oz. jars																								
SL-120-SASB-SB-3.0-4.0	01.13.1	1125	SOIL	NONE	2 16 oz. jars																								
SL-120-SASB-SB-3.5	01.13.1	1120	SOIL	NONE	4 ENCORES																								
SL-119-SASB-SB-3.0-4.0	01.13.1	0853	SOIL	NONE	2 16 oz. jars																								
SL-119-SASB-SB-3.5	01.13.1	0849	SOIL	NONE	4 ENCORES																								
SED-009-SIV-SD-0.0-0.5	01.13.1	0945	SOIL	NONE	1 16 oz. jar & 1 6" sleeve																								
SED-026-SIV-SD-0.0-0.5	01.13.1	1115	SOIL	NONE	1 16 oz. jar & 1 6" sleeve																								

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

June 20, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 05/24/2011

Group Number: 1248215

SDG: DE159

PO Number: 1203-004-008-AL

Release Number: TRACKING #12090

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-084-SA5DN-SB-4.0-5.0 Soil	6296035
SL-089-SA5DN-SB-4.0-5.0 Soil	6296036
SL-081-SA5DN-SB-4.0-5.0 Soil	6296037
SL-081-SA5DN-SB-9.0-10.0 Soil	6296038
SL-075-SA5DN-SB-4.0-5.0 Soil	6296039
SL-075-SA5DN-SB-9.0-10.0 Soil	6296040
TB-052311 Water	6296041
SL-015-SA5DN-SS-0.0-0.5 Soil	6296042
SL-016-SA5DN-SS-0.0-0.5 Soil	6296043
SL-017-SA5DN-SS-0.0-0.5 Soil	6296044
SL-019-SA5DN-SS-0.0-0.5 Soil	6296045
SL-021-SA5DN-SS-0.0-0.5 Soil	6296046
SL-022-SA5DN-SS-0.0-0.5 Soil	6296047
SL-022-SA5DN-SS-0.0-0.5MS Soil	6296048
SL-022-SA5DN-SS-0.0-0.5MSD Soil	6296049
SL-022-SA5DN-SS-0.0-0.5DUP Soil	6296050
SL-023-SA5DN-SS-0.0-0.5 Soil	6296051
SL-052-SA5DN-SS-0.0-0.5 Soil	6296052
SL-053-SA5DN-SS-0.0-0.5 Soil	6296053
DUP05-SA5DN-QC-052311 Soil	6296054
EB05-SA5DN-SS-052311 Water	6296055
SED-035-SIV-SD Sediment	6296056

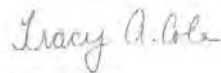
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Tracy A. Cole
Senior Specialist

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.0 J	6.9	8.3		0.93
06192	Benzene	71-43-2	0.10 U	0.10	4.1		0.93
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.1		0.93
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.1		0.93
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.1		0.93
06192	Bromoform	75-25-2	0.41 U	0.41	4.1		0.93
06192	Bromomethane	74-83-9	0.26 U	0.26	4.1		0.93
06192	2-Butanone	78-93-3	1.3 U	1.3	8.3		0.93
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.1		0.93
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.1		0.93
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.1		0.93
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.1		0.93
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.1		0.93
06192	Chloroethane	75-00-3	0.13 U	0.13	4.1		0.93
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.1		0.93
06192	Chloroform	67-66-3	0.12 U	0.12	4.1		0.93
06192	Chloromethane	74-87-3	0.34 U	0.34	4.1		0.93
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.1		0.93
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.1		0.93
06192	Chlorotrifluoroethene	79-38-9	0.52 U	0.52	5.2		0.93
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.72 U	0.72	4.1		0.93
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.1		0.93
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.1		0.93
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.1		0.93
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.1		0.93
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.1		0.93
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.1		0.93
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.1		0.93
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.1		0.93
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.1		0.93
06192	1,1-Dichloroethene	75-35-4	0.40 U	0.40	4.1		0.93
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.1		0.93
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.1		0.93
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.1		0.93
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.1		0.93
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.1		0.93
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.1		0.93
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.1		0.93
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.1		0.93
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.1		0.93
06192	Freon 113	76-13-1	0.11 U	0.11	4.1		0.93
06192	Freon 133a	75-88-7	0.52 U	0.52	5.2		0.93
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.1		0.93
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.3		0.93
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.1		0.93
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.1		0.93
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.1		0.93
06192	4-Methyl-2-pentanone	108-10-1	0.40 U	0.40	8.3		0.93
06192	Methylene Chloride	75-09-2	1.2 J	0.25	4.1		0.93
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.1		0.93

*=This limit was used in the evaluation of the final result

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Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.1		0.93
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.1		0.93
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.1		0.93
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.1		0.93
06192	Toluene	108-88-3	0.08 U	0.08	4.1		0.93
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.1		0.93
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.1		0.93
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.1		0.93
06192	1,1,2-Trichloroethane	79-00-5	0.28 U	0.28	4.1		0.93
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.1		0.93
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.1		0.93
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.1		0.93
06192	1,2,4-Trimethylbenzene	95-63-6	0.41 U	0.41	4.1		0.93
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.1		0.93
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.1		0.93
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.1		0.93
06192	o-Xylene	95-47-6	0.18 U	0.18	4.1		0.93
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.5 U	5.5	16		24.85
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	74	U 74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U 74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	74	U 74	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U 0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U 0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U 0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	20		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Chrysene	218-01-9	0.36 U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73 U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5 U	6.5	20		1
10138	Fluoranthene	206-44-0	0.73 U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73 U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73 U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20		1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66 U	66	130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44 U	44	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88 U	88	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88 U	88	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	44 U	44	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	44 U	44	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	44 U	44	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	330	1000000 0	1
10132	Nitrobenzene	98-95-3	44 U	44	130	1000000 0	1
10132	Nitroglycerin	55-63-0	880 U	880	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	88 U	88	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	88 U	88	130	1000000 0	1
10132	PETN	78-11-5	880 U	880	2,700	1000000 0	1
10132	RDX	121-82-4	55 U	55	130	1000000 0	1
10132	Tetryl	479-45-8	68 U	68	130	1000000 0	1

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Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*		Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg		ug/kg		ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	44	U	44		130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44	U	44		130	10000000	1
Pesticides/PCBs		SW-846 8082	ug/kg		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1		3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1		3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1		3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36		1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36		1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36		1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36		1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36		1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36		1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43		1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36		1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36		1.9		1
Metals		SW-846 6010B	mg/kg		mg/kg		mg/kg	mg/kg	
01643	Aluminum	7429-90-5	23,100		5.35		21.3		1
07914	Boron	7440-42-8	0.947	U	0.947		5.32		1
01650	Calcium	7440-70-2	33,200		6.52		21.3		1
01654	Iron	7439-89-6	24,000		5.01		21.3		1
01656	Lithium	7439-93-2	23.5		0.23		2.1		1
01657	Magnesium	7439-95-4	4,850		2.70		10.6		1
06958	Manganese	7439-96-5	211		0.0830		0.532		1
10145	Phosphorus	7723-14-0	224		0.596		10.6		1
01662	Potassium	7440-09-7	2,100		19.1		53.2		1
01667	Sodium	7440-23-5	261		39.7		106		1
07968	Strontium	7440-24-6	44.6		0.0659		0.532		1
06969	Tin	7440-31-5	2.79	J	1.06		10.6		1
06970	Titanium	7440-32-6	1,310		0.404		1.06		1
10146	Zirconium	7440-67-7	4.74	J	0.893		5.32		1
		SW-846 6020	mg/kg		mg/kg		mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.259		0.0664		0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.								
06125	Arsenic	7440-38-2	9.95		0.0885		0.442		2
06126	Barium	7440-39-3	167		0.119		0.442		2
06127	Beryllium	7440-41-7	0.867		0.0177		0.111		2
06128	Cadmium	7440-43-9	0.153		0.0442		0.111		2
06131	Chromium	7440-47-3	20.7		0.133		0.442		2
06132	Cobalt	7440-48-4	4.97		0.0221		0.111		2
06133	Copper	7440-50-8	14.0		0.0730		0.442		2
06135	Lead	7439-92-1	10.6		0.0115		0.221		2
06138	Molybdenum	7439-98-7	0.605		0.0553		0.111		2

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Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06139	Nickel	7440-02-0	20.0	0.111	0.442		2
06141	Selenium	7782-49-2	0.0788 J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0345 J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.405	0.0332	0.111		2
06148	Vanadium	7440-62-2	77.3	0.0243	0.111		2
06149	Zinc	7440-66-6	70.2	0.619	3.32		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0663 J	0.0031	0.108		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	5.9	0.88	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.2		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.85 J	0.22	1.1		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.34	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	9.6	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-084-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 16:33	Chelsea B Eastep	0.93
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 19:57	Sara E Johnson	24.85

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0844 SDG#: DE159-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:51	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 15:48	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 07:23	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 17:33	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 20:46	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:00	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:37	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:37	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:55	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1

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Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0844 SDG#: DE159-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 18:48	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 15:13	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 14:50	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 9

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.9 J	6.3	7.5		0.86
06192	Benzene	71-43-2	0.09 U	0.09	3.8		0.86
06192	Bromobenzene	108-86-1	0.12 U	0.12	3.8		0.86
06192	Bromochloromethane	74-97-5	0.31 U	0.31	3.8		0.86
06192	Bromodichloromethane	75-27-4	0.07 U	0.07	3.8		0.86
06192	Bromoform	75-25-2	0.38 U	0.38	3.8		0.86
06192	Bromomethane	74-83-9	0.24 U	0.24	3.8		0.86
06192	2-Butanone	78-93-3	1.1 U	1.1	7.5		0.86
06192	n-Butylbenzene	104-51-8	0.11 U	0.11	3.8		0.86
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	3.8		0.86
06192	tert-Butylbenzene	98-06-6	0.15 U	0.15	3.8		0.86
06192	Carbon Tetrachloride	56-23-5	0.13 U	0.13	3.8		0.86
06192	Chlorobenzene	108-90-7	0.10 U	0.10	3.8		0.86
06192	Chloroethane	75-00-3	0.12 U	0.12	3.8		0.86
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.28 U	0.28	3.8		0.86
06192	Chloroform	67-66-3	0.11 U	0.11	3.8		0.86
06192	Chloromethane	74-87-3	0.31 U	0.31	3.8		0.86
06192	2-Chlorotoluene	95-49-8	0.13 U	0.13	3.8		0.86
06192	4-Chlorotoluene	106-43-4	0.13 U	0.13	3.8		0.86
06192	Chlorotrifluoroethene	79-38-9	0.47 U	0.47	4.7		0.86
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.66 U	0.66	3.8		0.86
06192	Dibromochloromethane	124-48-1	0.19 U	0.19	3.8		0.86
06192	1,2-Dibromoethane	106-93-4	0.16 U	0.16	3.8		0.86
06192	Dibromomethane	74-95-3	0.23 U	0.23	3.8		0.86
06192	1,2-Dichlorobenzene	95-50-1	0.08 U	0.08	3.8		0.86
06192	1,3-Dichlorobenzene	541-73-1	0.11 U	0.11	3.8		0.86
06192	1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	3.8		0.86
06192	Dichlorodifluoromethane	75-71-8	0.11 U	0.11	3.8		0.86
06192	1,1-Dichloroethane	75-34-3	0.09 U	0.09	3.8		0.86
06192	1,2-Dichloroethane	107-06-2	0.14 U	0.14	3.8		0.86
06192	1,1-Dichloroethene	75-35-4	0.37 U	0.37	3.8		0.86
06192	cis-1,2-Dichloroethene	156-59-2	0.18 U	0.18	3.8		0.86
06192	trans-1,2-Dichloroethene	156-60-5	0.11 U	0.11	3.8		0.86
06192	1,2-Dichloropropane	78-87-5	0.16 U	0.16	3.8		0.86
06192	1,3-Dichloropropane	142-28-9	0.07 U	0.07	3.8		0.86
06192	2,2-Dichloropropane	594-20-7	0.16 U	0.16	3.8		0.86
06192	1,1-Dichloropropene	563-58-6	0.12 U	0.12	3.8		0.86
06192	cis-1,3-Dichloropropene	10061-01-5	0.15 U	0.15	3.8		0.86
06192	trans-1,3-Dichloropropene	10061-02-6	0.16 U	0.16	3.8		0.86
06192	Ethylbenzene	100-41-4	0.06 U	0.06	3.8		0.86
06192	Freon 113	76-13-1	0.10 U	0.10	3.8		0.86
06192	Freon 133a	75-88-7	0.47 U	0.47	4.7		0.86
06192	Hexachlorobutadiene	87-68-3	0.13 U	0.13	3.8		0.86
06192	2-Hexanone	591-78-6	1.5 U	1.5	7.5		0.86
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	3.8		0.86
06192	p-Isopropyltoluene	99-87-6	0.10 U	0.10	3.8		0.86
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20 U	0.20	3.8		0.86
06192	4-Methyl-2-pentanone	108-10-1	0.37 U	0.37	7.5		0.86
06192	Methylene Chloride	75-09-2	0.82 J	0.23	3.8		0.86
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	3.8		0.86

*=This limit was used in the evaluation of the final result

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Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.09 U	0.09	3.8		0.86
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.10 U	0.10	3.8		0.86
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22 U	0.22	3.8		0.86
06192	Tetrachloroethene	127-18-4	0.19 U	0.19	3.8		0.86
06192	Toluene	108-88-3	0.07 U	0.07	3.8		0.86
06192	1,2,3-Trichlorobenzene	87-61-6	0.13 U	0.13	3.8		0.86
06192	1,2,4-Trichlorobenzene	120-82-1	0.17 U	0.17	3.8		0.86
06192	1,1,1-Trichloroethane	71-55-6	0.19 U	0.19	3.8		0.86
06192	1,1,2-Trichloroethane	79-00-5	0.25 U	0.25	3.8		0.86
06192	Trichloroethene	79-01-6	0.14 U	0.14	3.8		0.86
06192	Trichlorofluoromethane	75-69-4	0.27 U	0.27	3.8		0.86
06192	1,2,3-Trichloropropane	96-18-4	0.31 U	0.31	3.8		0.86
06192	1,2,4-Trimethylbenzene	95-63-6	0.38 U	0.38	3.8		0.86
06192	1,3,5-Trimethylbenzene	108-67-8	0.09 U	0.09	3.8		0.86
06192	Vinyl Chloride	75-01-4	0.19 U	0.19	3.8		0.86
06192	m+p-Xylene	179601-23-1	0.16 U	0.16	3.8		0.86
06192	o-Xylene	95-47-6	0.16 U	0.16	3.8		0.86
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.6 U	4.6	14		21.11
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	18.3 U	18.3	36.7		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1

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Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U 0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.72	U 0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.72	U 0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U 0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U 0.72	1.8		1

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Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Benzo(k)fluoranthene	207-08-9	0.72 U	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5 U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5 U	6.5	20		1
10138	Chrysene	218-01-9	0.36 U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5 U	6.5	20		1
10138	Fluoranthene	206-44-0	0.72 U	0.72	1.8		1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72 U	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20		1
10138	Phenanthrene	85-01-8	0.72 U	0.72	1.8		1
10138	Pyrene	129-00-0	0.72 U	0.72	1.8		1
GC	Volatiles	TPH GRO SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1		22.2
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66 U	66	130	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44 U	44	130	1000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88 U	88	260	1000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88 U	88	260	1000000	1
10132	1,3-Dinitrobenzene	99-65-0	44 U	44	130	1000000	1
10132	2,4-Dinitrotoluene	121-14-2	44 U	44	130	1000000	1
10132	2,6-Dinitrotoluene	606-20-2	44 U	44	130	1000000	1
10132	HMX	2691-41-0	110 U	110	330	1000000	1
10132	Nitrobenzene	98-95-3	44 U	44	130	1000000	1
10132	Nitroglycerin	55-63-0	880 U	880	2,600	1000000	1
10132	2-Nitrotoluene	88-72-2	88 U	88	130	1000000	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000	1

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Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Nitrotoluene	99-99-0	88 U	88	130	10000000	1
10132	PETN	78-11-5	880 U	880	2,600	10000000	1
10132	RDX	121-82-4	55 U	55	130	10000000	1
10132	Tetryl	479-45-8	67 U	67	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	44 U	44	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44 U	44	130	10000000	1
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	650 U	650	1,600		1
Perchlorate		SW-846 6850 1/2007	ug/kg	ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3 U	2.3	5.5		1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36 U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36 U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36 U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43 U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	0.44 U	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44 U	0.44	1.3		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	550		1
10501	Isopropanol	67-63-0	110 U	110	550		1
10501	Methanol	67-56-1	110 U	110	550		1

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Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

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Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC Miscellaneous	SW-846 8015B modified		mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.5 U	5.5	11		1
08283	Ethylene glycol	107-21-1	5.5 U	5.5	11		1
08283	Propylene glycol	57-55-6	5.5 U	5.5	11		1
Terphenyls	SW-846 8015B		mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	3.9		1
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	25,600	5.48	21.8		1
07914	Boron	7440-42-8	0.969 U	0.969	5.45		1
01650	Calcium	7440-70-2	4,530	6.68	21.8		1
01654	Iron	7439-89-6	27,300	5.13	21.8		1
01656	Lithium	7439-93-2	27.0	0.24	2.2		1
01657	Magnesium	7439-95-4	5,550	2.77	10.9		1
06958	Manganese	7439-96-5	430	0.0850	0.545		1
10145	Phosphorus	7723-14-0	253	0.610	10.9		1
01662	Potassium	7440-09-7	2,650	19.6	54.5		1
01667	Sodium	7440-23-5	191	40.6	109		1
07968	Strontium	7440-24-6	28.8	0.0675	0.545		1
06969	Tin	7440-31-5	3.00 J	1.09	10.9		1
06970	Titanium	7440-32-6	1,390	0.414	1.09		1
10146	Zirconium	7440-67-7	5.65	0.915	5.45		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.370	0.0647	0.216		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	12.3	0.0863	0.431		2
06126	Barium	7440-39-3	176	0.116	0.431		2
06127	Beryllium	7440-41-7	1.14	0.0173	0.108		2
06128	Cadmium	7440-43-9	0.330	0.0431	0.108		2
06131	Chromium	7440-47-3	22.7	0.129	0.431		2
06132	Cobalt	7440-48-4	9.24	0.0216	0.108		2
06133	Copper	7440-50-8	20.1	0.0712	0.431		2
06135	Lead	7439-92-1	15.4	0.0112	0.216		2
06138	Molybdenum	7439-98-7	0.540	0.0539	0.108		2
06139	Nickel	7440-02-0	29.9	0.108	0.431		2
06141	Selenium	7782-49-2	0.0574 J	0.0431	0.431		2
06142	Silver	7440-22-4	0.0750 J	0.0129	0.108		2
06145	Thallium	7440-28-0	0.440	0.0324	0.108		2
06148	Vanadium	7440-62-2	90.3	0.0237	0.108		2
06149	Zinc	7440-66-6	79.6	0.604	3.24		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.103		1

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Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 300.0			mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.1	0.88	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1 J	0.88	1.7		1
EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	33.0		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.41 J	0.22	1.1		1
SW-846 9012B			mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.53		1
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	7.55	0.0100	0.0100		1
Wet Chemistry EPA 160.3 modified			%	%	%	%	
11624	Moisture Content by 160.3	n.a.	9.1	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-089-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 16:55	Chelsea B Eastep	0.86
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:17	Sara E Johnson	21.11
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:56	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 15:54	Lois E Hiltz	n.a.
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 20:05	Matthew S Woods	1

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SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

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Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 07:49	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 18:04	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11151B34A	05/31/2011 17:01	Elizabeth J Marin	22.2
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:53	Lois E Hiltz	n.a.
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 21:28	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 19:39	James H Place	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/06/2011 21:40	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:18	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111570011A	06/07/2011 22:48	Heather E Williams	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:13	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:24	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 07:22	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	111570011A	06/06/2011 18:30	Sally L Appleyard	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0894 SDG#: DE159-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:24	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:24	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:40	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:30	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 19:30	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 16:19	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 14:56	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:33	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.7	7.0	8.3		0.94
06192	Benzene	71-43-2	0.10 U	0.10	4.2		0.94
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.2		0.94
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.2		0.94
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.2		0.94
06192	Bromoform	75-25-2	0.42 U	0.42	4.2		0.94
06192	Bromomethane	74-83-9	0.26 U	0.26	4.2		0.94
06192	2-Butanone	78-93-3	1.3 U	1.3	8.3		0.94
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.2		0.94
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.2		0.94
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.2		0.94
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.2		0.94
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.2		0.94
06192	Chloroethane	75-00-3	0.14 U	0.14	4.2		0.94
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.2		0.94
06192	Chloroform	67-66-3	0.12 U	0.12	4.2		0.94
06192	Chloromethane	74-87-3	0.34 U	0.34	4.2		0.94
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.2		0.94
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.2		0.94
06192	Chlorotrifluoroethene	79-38-9	0.52 U	0.52	5.2		0.94
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73 U	0.73	4.2		0.94
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.2		0.94
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.2		0.94
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.2		0.94
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.2		0.94
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.2		0.94
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.2		0.94
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.2		0.94
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.2		0.94
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.2		0.94
06192	1,1-Dichloroethene	75-35-4	0.41 U	0.41	4.2		0.94
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.2		0.94
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.2		0.94
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.2		0.94
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.2		0.94
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.2		0.94
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.2		0.94
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.2		0.94
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.2		0.94
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.2		0.94
06192	Freon 113	76-13-1	0.11 U	0.11	4.2		0.94
06192	Freon 133a	75-88-7	0.52 U	0.52	5.2		0.94
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.2		0.94
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.3		0.94
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.2		0.94
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.2		0.94
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.2		0.94
06192	4-Methyl-2-pentanone	108-10-1	0.41 U	0.41	8.3		0.94
06192	Methylene Chloride	75-09-2	0.79 J	0.25	4.2		0.94
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.2		0.94

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.2		0.94
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.2		0.94
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.2		0.94
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.2		0.94
06192	Toluene	108-88-3	0.08 U	0.08	4.2		0.94
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.2		0.94
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.2		0.94
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.2		0.94
06192	1,1,2-Trichloroethane	79-00-5	0.28 U	0.28	4.2		0.94
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.2		0.94
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.2		0.94
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.2		0.94
06192	1,2,4-Trimethylbenzene	95-63-6	0.42 U	0.42	4.2		0.94
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.2		0.94
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.2		0.94
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.2		0.94
06192	o-Xylene	95-47-6	0.18 U	0.18	4.2		0.94
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.3 U	5.3	16		23.95
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U 0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.72	U 0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.72	U 0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U 0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U 0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.72	U 0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	20		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Chrysene	218-01-9	0.36 U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5 U	6.5	20		1
10138	Fluoranthene	206-44-0	0.72 U	0.72	1.8		1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72 U	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20		1
10138	Phenanthrene	85-01-8	0.72 U	0.72	1.8		1
10138	Pyrene	129-00-0	0.72 U	0.72	1.8		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66 U	66	130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44 U	44	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88 U	88	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88 U	88	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	44 U	44	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	44 U	44	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	44 U	44	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	330	1000000 0	1
10132	Nitrobenzene	98-95-3	44 U	44	130	1000000 0	1
10132	Nitroglycerin	55-63-0	880 U	880	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	88 U	88	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	88 U	88	130	1000000 0	1
10132	PETN	78-11-5	880 U	880	2,700	1000000 0	1
10132	RDX	121-82-4	55 U	55	130	1000000 0	1
10132	Tetryl	479-45-8	68 U	68	130	1000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	44 U	44	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44 U	44	130	10000000	1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36 U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36 U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36 U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43 U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	28,900	5.56	22.1		1
07914	Boron	7440-42-8	1.00 J	0.983	5.52		1
01650	Calcium	7440-70-2	7,380	6.77	22.1		1
01654	Iron	7439-89-6	29,500	10.4	44.2		2
01656	Lithium	7439-93-2	28.1	0.24	2.2		1
01657	Magnesium	7439-95-4	6,630	2.81	11.0		1
06958	Manganese	7439-96-5	407	0.0862	0.552		1
10145	Phosphorus	7723-14-0	313	0.619	11.0		1
01662	Potassium	7440-09-7	3,490	19.9	55.2		1
01667	Sodium	7440-23-5	575	41.2	110		1
07968	Strontium	7440-24-6	39.1	0.0685	0.552		1
06969	Tin	7440-31-5	2.78 J	1.10	11.0		1
06970	Titanium	7440-32-6	1,710	0.420	1.10		1
10146	Zirconium	7440-67-7	6.40	0.928	5.52		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.331	0.0656	0.219		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.31	0.0875	0.438		2
06126	Barium	7440-39-3	217	0.295	1.09		5
06127	Beryllium	7440-41-7	1.04	0.0175	0.109		2
06128	Cadmium	7440-43-9	0.448	0.0438	0.109		2
06131	Chromium	7440-47-3	28.3	0.131	0.438		2
06132	Cobalt	7440-48-4	14.7	0.0219	0.109		2
06133	Copper	7440-50-8	18.2	0.0722	0.438		2
06135	Lead	7439-92-1	14.7	0.0114	0.219		2
06138	Molybdenum	7439-98-7	0.579	0.0547	0.109		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06139	Nickel	7440-02-0	29.5	0.109	0.438		2
06141	Selenium	7782-49-2	0.0438 U	0.0438	0.438		2
06142	Silver	7440-22-4	0.0729 J	0.0131	0.109		2
06145	Thallium	7440-28-0	0.478	0.0328	0.109		2
06148	Vanadium	7440-62-2	93.1	0.0241	0.109		2
06149	Zinc	7440-66-6	86.3	0.613	3.28		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.106		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	20.8	0.88	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	33.1		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.4	0.22	1.1		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.13	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	9.5	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-081-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 17:17	Chelsea B Eastep	0.94
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:36	Sara E Johnson	23.95

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0814 SDG#: DE159-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:03	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 16:00	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 08:15	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 18:36	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 22:11	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:37	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:55	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:44	David K Beck	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:42	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:42	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:47	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:47	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:56	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0814 SDG#: DE159-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:45	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 16:41	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:13	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	360	U 360	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C							
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:							
2-nitrophenol							
4-bromophenyl-phenylether							
hexachlorobenzene							
hexachlorobutadiene							
GC/MS Semivolatiles SW-846 8270C SIM							
10138	Acenaphthene	83-32-9	0.73 U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36 U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73 U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73 U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	1.1 J	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73 U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73 U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6 U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6 U	6.6	20		1
10138	Chrysene	218-01-9	0.55 J	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73 U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6 U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6 U	6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.6 U	6.6	20		1
10138	Fluoranthene	206-44-0	0.73 U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73 U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73 U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6 U	6.6	20		1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8		1
Explosives SW-846 8330A							
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	64 U	64	130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	43 U	43	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	86 U	86	260	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	86 U	86	260	1000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*		Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg		ug/kg		ug/kg	ug/kg	
10132	1,3-Dinitrobenzene	99-65-0	43	U	43		130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	43	U	43		130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	43	U	43		130	1000000 0	1
10132	HMX	2691-41-0	110	U	110		320	1000000 0	1
10132	Nitrobenzene	98-95-3	43	U	43		130	1000000 0	1
10132	Nitroglycerin	55-63-0	860	U	860		2,600	1000000 0	1
10132	2-Nitrotoluene	88-72-2	86	U	86		130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110	U	110		130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	86	U	86		130	1000000 0	1
10132	PETN	78-11-5	860	U	860		2,600	1000000 0	1
10132	RDX	121-82-4	54	U	54		130	1000000 0	1
10132	Tetryl	479-45-8	66	U	66		130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	43	U	43		130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	43	U	43		130	1000000 0	1
Pesticides/PCBs		SW-846 8082	ug/kg		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1		3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1		3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1		3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36		1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36		1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36		1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36		1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36		1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36		1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43		1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36		1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36		1.9		1
Metals		SW-846 6010B	mg/kg		mg/kg		mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,100		5.29		21.0		1
07914	Boron	7440-42-8	0.935	U	0.935		5.25		1
01650	Calcium	7440-70-2	7,150		6.44		21.0		1
01654	Iron	7439-89-6	21,500		4.95		21.0		1
01656	Lithium	7439-93-2	25.8		0.23		2.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	4,490	2.67	10.5		1
06958	Manganese	7439-96-5	284	0.0820	0.525		1
10145	Phosphorus	7723-14-0	291	0.588	10.5		1
01662	Potassium	7440-09-7	2,320	18.9	52.5		1
01667	Sodium	7440-23-5	341	39.2	105		1
07968	Strontium	7440-24-6	23.0	0.0652	0.525		1
06969	Tin	7440-31-5	2.66 J	1.05	10.5		1
06970	Titanium	7440-32-6	1,230	0.399	1.05		1
10146	Zirconium	7440-67-7	3.95 J	0.883	5.25		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.179 J	0.0643	0.214		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.69	0.0857	0.429		2
06126	Barium	7440-39-3	113	0.116	0.429		2
06127	Beryllium	7440-41-7	0.735	0.0171	0.107		2
06128	Cadmium	7440-43-9	0.162	0.0429	0.107		2
06131	Chromium	7440-47-3	18.7	0.129	0.429		2
06132	Cobalt	7440-48-4	6.21	0.0214	0.107		2
06133	Copper	7440-50-8	10.8	0.0707	0.429		2
06135	Lead	7439-92-1	7.15	0.0111	0.214		2
06138	Molybdenum	7439-98-7	0.418	0.0536	0.107		2
06139	Nickel	7440-02-0	17.7	0.107	0.429		2
06141	Selenium	7782-49-2	0.0429 U	0.0429	0.429		2
06142	Silver	7440-22-4	0.0560 J	0.0129	0.107		2
06145	Thallium	7440-28-0	0.337	0.0321	0.107		2
06148	Vanadium	7440-62-2	55.1	0.0236	0.107		2
06149	Zinc	7440-66-6	63.5	0.600	3.21		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0130 J	0.0031	0.109		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.9	0.87	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.8		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.60	0.0100	0.0100		1

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Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		EPA 160.3 modified		%	%	%	
11624	Moisture Content by 160.3	n.a.	8.5	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 08:42	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 19:06	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 22:53	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:55	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:46	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:46	David K Beck	2

*=This limit was used in the evaluation of the final result

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Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0819 SDG#: DE159-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:58	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:59	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 17:25	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 15:19	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 1 of 7

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.5	6.9	8.3		0.9
06192	Benzene	71-43-2	0.10 U	0.10	4.1		0.9
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.1		0.9
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.1		0.9
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.1		0.9
06192	Bromoform	75-25-2	0.41 U	0.41	4.1		0.9
06192	Bromomethane	74-83-9	0.26 U	0.26	4.1		0.9
06192	2-Butanone	78-93-3	1.3 U	1.3	8.3		0.9
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.1		0.9
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.1		0.9
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.1		0.9
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.1		0.9
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.1		0.9
06192	Chloroethane	75-00-3	0.14 U	0.14	4.1		0.9
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.1		0.9
06192	Chloroform	67-66-3	0.12 U	0.12	4.1		0.9
06192	Chloromethane	74-87-3	0.34 U	0.34	4.1		0.9
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.1		0.9
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.1		0.9
06192	Chlorotrifluoroethene	79-38-9	0.52 U	0.52	5.2		0.9
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73 U	0.73	4.1		0.9
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.1		0.9
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.1		0.9
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.1		0.9
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.1		0.9
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.1		0.9
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.1		0.9
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.1		0.9
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.1		0.9
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.1		0.9
06192	1,1-Dichloroethene	75-35-4	0.40 U	0.40	4.1		0.9
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.1		0.9
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.1		0.9
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.1		0.9
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.1		0.9
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.1		0.9
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.1		0.9
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.1		0.9
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.1		0.9
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.1		0.9
06192	Freon 113	76-13-1	0.11 U	0.11	4.1		0.9
06192	Freon 133a	75-88-7	0.52 U	0.52	5.2		0.9
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.1		0.9
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.3		0.9
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.1		0.9
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.1		0.9
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.1		0.9
06192	4-Methyl-2-pentanone	108-10-1	0.40 U	0.40	8.3		0.9
06192	Methylene Chloride	75-09-2	1.1 J	0.25	4.1		0.9
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.1		0.9

*=This limit was used in the evaluation of the final result

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Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.1		0.9
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.1		0.9
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.1		0.9
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.1		0.9
06192	Toluene	108-88-3	0.08 U	0.08	4.1		0.9
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.1		0.9
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.1		0.9
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.1		0.9
06192	1,1,2-Trichloroethane	79-00-5	0.28 U	0.28	4.1		0.9
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.1		0.9
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.1		0.9
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.1		0.9
06192	1,2,4-Trimethylbenzene	95-63-6	0.41 U	0.41	4.1		0.9
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.1		0.9
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.1		0.9
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.1		0.9
06192	o-Xylene	95-47-6	0.18 U	0.18	4.1		0.9
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.2 U	5.2	15		22.36
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1

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Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U 0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U 0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U 0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U 0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U 0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21		1

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Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
			ug/kg	ug/kg	ug/kg	ug/kg	
10138	Chrysene	218-01-9	0.38 U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9 U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9 U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9 U	6.9	21		1
10138	Fluoranthene	206-44-0	0.76 U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76 U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76 U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76 U	0.76	1.9		1
Perchlorate SW-846 6850 1/2007							
			ug/kg	ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate EPA 6850	14797-73-0	3.9 J	2.4	5.8		1
Pesticides/PCBs SW-846 8082							
			ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	0.45 U	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
Metals SW-846 6010B							
			mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	30,900	5.58	22.2		1
07914	Boron	7440-42-8	0.988 U	0.988	5.55		1
01650	Calcium	7440-70-2	10,300	6.81	22.2		1
01654	Iron	7439-89-6	31,600	10.5	44.4		2
01656	Lithium	7439-93-2	35.2	0.24	2.2		1
01657	Magnesium	7439-95-4	6,880	2.82	11.1		1
06958	Manganese	7439-96-5	178	0.0866	0.555		1
10145	Phosphorus	7723-14-0	226	0.622	11.1		1
01662	Potassium	7440-09-7	3,230	20.0	55.5		1
01667	Sodium	7440-23-5	714	41.4	111		1
07968	Strontium	7440-24-6	57.5	0.0688	0.555		1
06969	Tin	7440-31-5	3.00 J	1.11	11.1		1
06970	Titanium	7440-32-6	1,290	0.422	1.11		1
10146	Zirconium	7440-67-7	4.75 J	0.933	5.55		1

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Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
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Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.204 J	0.0679	0.226		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.08	0.0906	0.453		2
06126	Barium	7440-39-3	170	0.122	0.453		2
06127	Beryllium	7440-41-7	1.00	0.0181	0.113		2
06128	Cadmium	7440-43-9	0.490	0.0453	0.113		2
06131	Chromium	7440-47-3	26.8	0.136	0.453		2
06132	Cobalt	7440-48-4	8.52	0.0226	0.113		2
06133	Copper	7440-50-8	16.8	0.0747	0.453		2
06135	Lead	7439-92-1	13.3	0.0118	0.226		2
06138	Molybdenum	7439-98-7	0.224	0.0566	0.113		2
06139	Nickel	7440-02-0	28.7	0.113	0.453		2
06141	Selenium	7782-49-2	0.0453 U	0.0453	0.453		2
06142	Silver	7440-22-4	0.0595 J	0.0136	0.113		2
06145	Thallium	7440-28-0	0.477	0.0340	0.113		2
06148	Vanadium	7440-62-2	77.2	0.0249	0.113		2
06149	Zinc	7440-66-6	76.6	0.634	3.40		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.111		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	13.3	0.92	1.2		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.6		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32 J	0.23	1.2		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.54	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	13.4	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 05/24/2011 09:40

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S0754 SDG#: DE159-05

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-075-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 17:40	Chelsea B Eastep	0.9
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:56	Sara E Johnson	22.36
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:09	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 16:06	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 09:08	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 19:38	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 21:59	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:13	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:59	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2

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Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0754 SDG#: DE159-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:48	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:48	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:59	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 20:13	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 17:47	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:36	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	24	J 19	380		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

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Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.8	U 3.8	9.4		5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.4		5
10138	Anthracene	120-12-7	1.9	U 1.9	9.4		5
10138	Benzo(a)anthracene	56-55-3	3.8	U 3.8	9.4		5
10138	Benzo(a)pyrene	50-32-8	3.8	U 3.8	9.4		5
10138	Benzo(b)fluoranthene	205-99-2	4.2	J 3.8	9.4		5
10138	Benzo(g,h,i)perylene	191-24-2	3.8	U 3.8	9.4		5
10138	Benzo(k)fluoranthene	207-08-9	3.8	U 3.8	9.4		5
10138	Chrysene	218-01-9	3.4	J 1.9	9.4		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U 3.8	9.4		5
10138	Fluoranthene	206-44-0	5.0	J 3.8	9.4		5
10138	Fluorene	86-73-7	3.8	U 3.8	9.4		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U 3.8	9.4		5
10138	1-Methylnaphthalene	90-12-0	3.8	U 3.8	9.4		5
10138	2-Methylnaphthalene	91-57-6	3.8	U 3.8	9.4		5
10138	Naphthalene	91-20-3	7.6	J 3.8	9.4		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U 3.8	9.4		5
10138	Phenanthrene	85-01-8	8.6	J 3.8	9.4		5
10138	Pyrene	129-00-0	3.8	U 3.8	9.4		5
	Reporting limits were raised due to interference from the sample matrix.						
Perchlorate	SW-846 6850 1/2007	ug/kg	ug/kg	ug/kg	ug/kg		
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U 2.4	5.8		1
Pesticides/PCBs	SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg		
10225	Aroclor 5432	63496-31-1	1.1	U 1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U 1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U 1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U 0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U 0.38	1.9		1

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Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.45 U	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,500	5.67	22.6		1
07914	Boron	7440-42-8	1.00 U	1.00	5.64		1
01650	Calcium	7440-70-2	42,600	6.92	22.6		1
01654	Iron	7439-89-6	19,700	5.31	22.6		1
01656	Lithium	7439-93-2	22.4	0.25	2.3		1
01657	Magnesium	7439-95-4	4,760	2.87	11.3		1
06958	Manganese	7439-96-5	301	0.0880	0.564		1
10145	Phosphorus	7723-14-0	387	0.632	11.3		1
01662	Potassium	7440-09-7	2,500	20.3	56.4		1
01667	Sodium	7440-23-5	393	42.1	113		1
07968	Strontium	7440-24-6	78.8	0.0699	0.564		1
06969	Tin	7440-31-5	2.78 J	1.13	11.3		1
06970	Titanium	7440-32-6	1,230	0.429	1.13		1
10146	Zirconium	7440-67-7	4.70 J	0.948	5.64		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.194 J	0.0664	0.221		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.16	0.0885	0.443		2
06126	Barium	7440-39-3	125	0.120	0.443		2
06127	Beryllium	7440-41-7	0.645	0.0177	0.111		2
06128	Cadmium	7440-43-9	0.484	0.0443	0.111		2
06131	Chromium	7440-47-3	20.7	0.133	0.443		2
06132	Cobalt	7440-48-4	8.19	0.0221	0.111		2
06133	Copper	7440-50-8	13.2	0.0730	0.443		2
06135	Lead	7439-92-1	8.38	0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.782	0.0553	0.111		2
06139	Nickel	7440-02-0	24.4	0.111	0.443		2
06141	Selenium	7782-49-2	0.0459 J	0.0443	0.443		2
06142	Silver	7440-22-4	0.0669 J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.379	0.0332	0.111		2
06148	Vanadium	7440-62-2	59.4	0.0243	0.111		2
06149	Zinc	7440-66-6	62.8	0.620	3.32		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.112		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 300.0							
07332	11a Anions by 300.0 - Fluoride	16984-48-8	6.3	0.92	1.2	mg/kg	1
EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.5	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.36 J	0.23	1.2	mg/kg	1
SW-846 9045C modified							
00394	18a pH by 9045C	n.a.	8.91	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	Moisture Content by 160.3	n.a.	13.1	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 09:35	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 09:52	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:05	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:32	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

S0759 SDG#: DE159-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:49	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:49	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:00	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 20:56	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 18:09	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:47	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: TB-052311 Water
SSFL Area IV Collocated Soil Sampling
TB-052311

LLI Sample # WW 6296041
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

TB523 SDG#: DE159-07TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6 U	6	20		1
10904	Benzene	71-43-2	0.5 U	0.5	5		1
10904	Bromobenzene	108-86-1	1 U	1	5		1
10904	Bromochloromethane	74-97-5	1 U	1	5		1
10904	Bromodichloromethane	75-27-4	1 U	1	5		1
10904	Bromoform	75-25-2	1 U	1	5		1
10904	Bromomethane	74-83-9	1 U	1	5		1
10904	2-Butanone	78-93-3	3 U	3	10		1
10904	n-Butylbenzene	104-51-8	1 U	1	5		1
10904	sec-Butylbenzene	135-98-8	1 U	1	5		1
10904	tert-Butylbenzene	98-06-6	1 U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1 U	1	5		1
10904	Chlorobenzene	108-90-7	0.8 U	0.8	5		1
10904	Chloroethane	75-00-3	1 U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2 U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10904	Chloroform	67-66-3	0.8 U	0.8	5		1
10904	Chloromethane	74-87-3	1 U	1	5		1
10904	2-Chlorotoluene	95-49-8	1 U	1	5		1
10904	4-Chlorotoluene	106-43-4	1 U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2 U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2 U	2	5		1
10904	Dibromochloromethane	124-48-1	1 U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1 U	1	5		1
10904	Dibromomethane	74-95-3	1 U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2 U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1 U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1 U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8 U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8 U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8 U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1 U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1 U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1 U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1 U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1 U	1	5		1
10904	Ethylbenzene	100-41-4	0.8 U	0.8	5		1
10904	Freon 113	76-13-1	2 U	2	10		1
10904	Freon 133a	75-88-7	2 U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2 U	2	5		1
10904	2-Hexanone	591-78-6	3 U	3	10		1
10904	Isopropylbenzene	98-82-8	1 U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1 U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3 U	3	10		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: TB-052311 Water
SSFL Area IV Collocated Soil Sampling
TB-052311

LLI Sample # WW 6296041
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

TB523 SDG#: DE159-07TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2 U	2	5		1
10904	n-Propylbenzene	103-65-1	1 U	1	5		1
10904	Styrene	100-42-5	1 U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8 U	0.8	5		1
10904	Toluene	108-88-3	0.7 U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1 U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8 U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8 U	0.8	5		1
10904	Trichloroethene	79-01-6	1 U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2 U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1 U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5		1
10904	Vinyl Chloride	75-01-4	1 U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8 U	0.8	5		1
10904	o-Xylene	95-47-6	0.8 U	0.8	5		1
GC/MS	Volatiles	SW-846 8260B SIM	ug/l	ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5 U	0.5	2.0		1
GC	Volatiles	TPH GRO SW-8015B	ug/l	ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	L111471AA	05/27/2011 21:44	Kevin A Sposito	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111461AA	05/26/2011 12:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E111461AA	05/26/2011 12:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L111471AA	05/27/2011 21:44	Kevin A Sposito	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	11151A20A	05/31/2011 15:27	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A20A	05/31/2011 15:27	Laura M Krieger	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	189 U	189	378		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-94-1	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	380		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.4	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.4	5
10138	Anthracene	120-12-7	1.9	U 1.9	9.4	5
10138	Benzo(a)anthracene	56-55-3	7.0	J 3.7	9.4	5
10138	Benzo(a)pyrene	50-32-8	9.4	3.7	9.4	5
10138	Benzo(b)fluoranthene	205-99-2	25	3.7	9.4	5
10138	Benzo(g,h,i)perylene	191-24-2	6.2	J 3.7	9.4	5
10138	Benzo(k)fluoranthene	207-08-9	3.7	U 3.7	9.4	5
10138	Chrysene	218-01-9	9.6	1.9	9.4	5
10138	Dibenz(a,h)anthracene	53-70-3	3.7	U 3.7	9.4	5
10138	Fluoranthene	206-44-0	11	3.7	9.4	5
10138	Fluorene	86-73-7	3.7	U 3.7	9.4	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	5.0	J 3.7	9.4	5
10138	1-Methylnaphthalene	90-12-0	3.7	U 3.7	9.4	5
10138	2-Methylnaphthalene	91-57-6	3.7	U 3.7	9.4	5
10138	Naphthalene	91-20-3	4.2	J 3.7	9.4	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.4	5
10138	Phenanthrene	85-01-8	6.5	J 3.7	9.4	5
10138	Pyrene	129-00-0	10	3.7	9.4	5

Reporting limits were raised due to interference from the sample matrix.

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U 67	130
					1000000 0
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U 45	130
					1000000 0

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	89 U	89	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	89 U	89	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	330	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	130	1000000 0	1
10132	Nitroglycerin	55-63-0	890 U	890	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	89 U	89	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	89 U	89	130	1000000 0	1
10132	PETN	78-11-5	890 U	890	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	130	1000000 0	1
10132	Tetryl	479-45-8	68 U	68	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	130	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.1		1
10401	Dalapon	75-99-0	5.0 U	5.0	10		1
10401	2,4-DB	94-82-6	0.70 U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45 U	0.45	1.4		1
10401	Dinoseb	88-85-7	0.91 U	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91 U	0.91	1.9		1
10401	MCPA	94-74-6	86 U	86	280		1
10401	MCPP (Mecoprop)	93-65-2	85 U	85	280		1
10401	2,4,5-T	93-76-5	0.093 U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085 U	0.085	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde	8315A	50-00-0	680 U	680	1,700	1
Perchlorate		SW-846 6850 1/2007	ug/kg	ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate	EPA 6850	14797-73-0	2.4 U	2.4	5.7	1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.075 U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.95	0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.084 U	0.084	0.19		1
01363	Chlordane	57-74-9	0.91 U	0.91	3.9		1
01363	p,p-DDD	72-54-8	0.075 U	0.075	0.39		1
01363	p,p-DDE	72-55-9	0.38 U	0.38	0.39		1
01363	p,p-DDT	50-29-3	1.4	0.075	0.39		1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.075 U	0.075	0.39		1
01363	Endosulfan I	959-98-8	0.11 U	0.11	0.19		1
01363	Endosulfan II	33213-65-9	0.075 U	0.075	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.075 U	0.075	0.39		1
01363	Endrin	72-20-8	0.075 U	0.075	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.28 U	0.28	0.39		1
01363	Endrin Ketone	53494-70-5	0.075 U	0.075	0.39		1
01363	Heptachlor	76-44-8	0.068 U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.11 U	0.11	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.11 U	0.11	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.5		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of beta-BHC detected in the reextract is .06 ug/kg. The concentration of DDT detected in the reextract is .18 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	11 U	11	38	10
10225	Aroclor 5442	12642-23-8	11 U	11	38	10
10225	Aroclor 5460	11126-42-4	11 U	11	38	10
10225	PCB-1016	12674-11-2	3.8 U	3.8	19	10
10225	PCB-1221	11104-28-2	3.8 U	3.8	19	10

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg		ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	3.8	U	3.8	19		10
10225	PCB-1242	53469-21-9	3.8	U	3.8	19		10
10225	PCB-1248	12672-29-6	3.8	U	3.8	19		10
10225	PCB-1254	11097-69-1	3.8	U	3.8	19		10
10225	PCB-1260	11096-82-5	55		4.4	19		10
10225	PCB-1262	37324-23-5	3.8	U	3.8	19		10
10225	PCB-1268	11100-14-4	3.8	U	3.8	19		10
GC Extractable TPH		SW-846 8015B modified	mg/kg		mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	2.3	U	2.3	6.8		5
10199	EFH (C15-C20)	n.a.	14		2.3	6.8		5
10199	EFH (C21-C30)	n.a.	39		2.3	6.8		5
10199	EFH (C30 - C40)	n.a.	180		2.3	6.8		5
10199	EFH (C8-C11)	n.a.	2.3	U	2.3	6.8		5
GC Miscellaneous		SW-846 8015B	ug/kg		ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	110	U	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg		mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7	U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7	U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7	U	5.7	11		1
Terphenyls		SW-846 8015B	mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
Metals		SW-846 6010B	mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	35,000		5.67	22.5		1
07914	Boron	7440-42-8	2.11	J	1.00	5.63		1
01650	Calcium	7440-70-2	11,500		6.90	22.5		1
01654	Iron	7439-89-6	33,800		10.6	45.1		2
01656	Lithium	7439-93-2	29.7		0.25	2.3		1
01657	Magnesium	7439-95-4	7,710		2.86	11.3		1
06958	Manganese	7439-96-5	396		0.0879	0.563		1
10145	Phosphorus	7723-14-0	332		0.631	11.3		1
01662	Potassium	7440-09-7	4,580		20.3	56.3		1
01667	Sodium	7440-23-5	123		42.0	113		1
07968	Strontium	7440-24-6	45.3		0.0698	0.563		1
06969	Tin	7440-31-5	3.06	J	1.13	11.3		1
06970	Titanium	7440-32-6	1,700		0.428	1.13		1
10146	Zirconium	7440-67-7	7.37		0.946	5.63		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.435	0.0663	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.24	0.0884	0.442		2
06126	Barium	7440-39-3	163	0.298	1.10		5
06127	Beryllium	7440-41-7	1.14	0.0177	0.110		2
06128	Cadmium	7440-43-9	0.421	0.0442	0.110		2
06131	Chromium	7440-47-3	29.7	0.133	0.442		2
06132	Cobalt	7440-48-4	11.2	0.0221	0.110		2
06133	Copper	7440-50-8	23.0	0.0729	0.442		2
06135	Lead	7439-92-1	17.9	0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.702	0.0552	0.110		2
06139	Nickel	7440-02-0	31.2	0.110	0.442		2
06141	Selenium	7782-49-2	0.148 J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0755 J	0.0133	0.110		2
06145	Thallium	7440-28-0	0.503	0.0331	0.110		2
06148	Vanadium	7440-62-2	100	0.0243	0.110		2
06149	Zinc	7440-66-6	106	0.619	3.31		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0458 J	0.0031	0.109		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2	0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.91 U	0.91	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	34.1		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.93 J	0.23	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.54		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.10	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	12.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL015 SDG#: DE159-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 16:38	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 15:11	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 10:23	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 23:36	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 19:48	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 10:14	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:11	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 05:47	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:50	Richard A Shober	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:33	Heather E Williams	5
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:28	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:36	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 16:22	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL015 SDG#: DE159-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:27	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:22	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:26	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:26	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:41	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:10	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:10	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/07/2011 14:55	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 16:10	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:34	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL015 SDG#: DE159-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 9

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	56.2	18.8	37.5		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Anthracene	120-12-7	54	J 19	190		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzo(a)anthracene	56-55-3	380	19	190		1
04688	Benzo(a)pyrene	50-32-8	280	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	420	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	110	J 19	190		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	20	J 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190		1
04688	4-Chloroaniline	106-47-8	75	U 75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190		1
04688	Chrysene	218-01-9	380	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	32	J 19	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	370		1
04688	Fluoranthene	206-44-0	470	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	130	J 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Methylphenol	95-48-7	37	U 37	190		1
04688	4-Methylphenol	106-44-5	37	U 37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	37	U 37	190		1
04688	4-Nitroaniline	100-01-6	75	U 75	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenanthrene	85-01-8	60	J 19	190		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	Pyrene	129-00-0	640	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.3	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.3	5
10138	Benzo(k)fluoranthene	207-08-9	14	3.7	9.3	5
10138	Fluorene	86-73-7	3.7	U 3.7	9.3	5
10138	1-Methylnaphthalene	90-12-0	3.7	U 3.7	9.3	5
10138	2-Methylnaphthalene	91-57-6	3.7	U 3.7	9.3	5
10138	Naphthalene	91-20-3	3.7	U 3.7	9.3	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.3	5

Reporting limits were raised due to interference from the sample matrix.

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

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SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

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Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67 U	67	130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45 U	45	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90 U	90	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90 U	90	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	130	1000000 0	1
10132	Nitroglycerin	55-63-0	900 U	900	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	90 U	90	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	90 U	90	130	1000000 0	1
10132	PETN	78-11-5	900 U	900	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	130	1000000 0	1
10132	Tetryl	479-45-8	69 U	69	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	130	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3 U	1.3	4.0		1
10401	Dalapon	75-99-0	4.9 U	4.9	10		1
10401	2,4-DB	94-82-6	0.69 U	0.69	1.9		1
10401	Dicamba	1918-00-9	0.45 U	0.45	1.3		1
10401	Dinoseb	88-85-7	0.89 U	0.89	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89 U	0.89	1.9		1
10401	MCPA	94-74-6	85 U	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84 U	84	280		1
10401	2,4,5-T	93-76-5	0.092 U	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.085 J	0.084	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the

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Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
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SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde	8315A	50-00-0	670 U	670	1,700	1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.074 U	0.074	0.19		1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.19		1
01363	Beta BHC	319-85-7	0.33	0.067	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.056 J	0.038	0.19		1
01363	Chlordane	57-74-9	2.3 J	0.90	3.8		1
01363	p,p-DDD	72-54-8	0.074 U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.37 U	0.37	0.38		1
01363	p,p-DDT	50-29-3	7.0	0.74	3.8		10
01363	Delta BHC	319-86-8	0.040 U	0.040	0.19		1
01363	Dieldrin	60-57-1	1.6 U	1.6	1.6		1
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.19		1
01363	Endosulfan II	33213-65-9	0.074 U	0.074	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074 U	0.074	0.38		1
01363	Endrin	72-20-8	0.074 U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074 U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.16 U	0.16	0.38		1
01363	Heptachlor	76-44-8	0.067 U	0.067	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.19 U	0.19	0.19		1
01363	Methoxychlor	72-43-5	0.75 U	0.75	1.9		1
01363	Mirex	2385-85-5	0.074 U	0.074	0.38		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.4		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of beta-BHC detected in the reextract is .06 ug/kg. The concentration of DDT detected in the reextract is 2.5 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	11 U	11	37	10
10225	Aroclor 5442	12642-23-8	11 U	11	37	10
10225	Aroclor 5460	11126-42-4	11 U	11	37	10
10225	PCB-1016	12674-11-2	3.7 U	3.7	19	10
10225	PCB-1221	11104-28-2	3.7 U	3.7	19	10

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SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

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SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg		ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	3.7	U	3.7	19		10
10225	PCB-1242	53469-21-9	3.7	U	3.7	19		10
10225	PCB-1248	12672-29-6	3.7	U	3.7	19		10
10225	PCB-1254	11097-69-1	3.7	U	3.7	19		10
10225	PCB-1260	11096-82-5	140		4.4	19		10
10225	PCB-1262	37324-23-5	3.7	U	3.7	19		10
10225	PCB-1268	11100-14-4	3.7	U	3.7	19		10
GC Extractable TPH		SW-846 8015B modified	mg/kg		mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	4.5	U	4.5	13		10
10199	EFH (C15-C20)	n.a.	8.2	J	4.5	13		10
10199	EFH (C21-C30)	n.a.	95		4.5	13		10
10199	EFH (C30 - C40)	n.a.	450		4.5	13		10
10199	EFH (C8-C11)	n.a.	4.5	U	4.5	13		10
GC Miscellaneous		SW-846 8015B	ug/kg		ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110	U	110	560		1
10501	Isopropanol	67-63-0	110	U	110	560		1
10501	Methanol	67-56-1	110	U	110	560		1
GC Miscellaneous		SW-846 8015B modified	mg/kg		mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.6	U	5.6	11		1
08283	Ethylene glycol	107-21-1	5.6	U	5.6	11		1
08283	Propylene glycol	57-55-6	5.6	U	5.6	11		1
Terphenyls		SW-846 8015B	mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	5.3		1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.9	J	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	3.9		1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.								
Metals		SW-846 6010B	mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	30,400		5.60	22.3		1
07914	Boron	7440-42-8	0.991	U	0.991	5.57		1
01650	Calcium	7440-70-2	12,200		6.83	22.3		1
01654	Iron	7439-89-6	30,900		10.5	44.5		2
01656	Lithium	7439-93-2	26.4		0.25	2.2		1
01657	Magnesium	7439-95-4	7,030		2.83	11.1		1
06958	Manganese	7439-96-5	382		0.0869	0.557		1
10145	Phosphorus	7723-14-0	389		0.624	11.1		1
01662	Potassium	7440-09-7	4,340		20.0	55.7		1
01667	Sodium	7440-23-5	129		41.5	111		1
07968	Strontium	7440-24-6	45.1		0.0691	0.557		1
06969	Tin	7440-31-5	2.88	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,530		0.423	1.11		1

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Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

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SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
10146	Zirconium	7440-67-7	6.61	0.936	5.57	mg/kg	1
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.300	0.0662	0.221	mg/kg	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.68	0.0882	0.441		2
06126	Barium	7440-39-3	159	0.119	0.441		2
06127	Beryllium	7440-41-7	0.833	0.0176	0.110		2
06128	Cadmium	7440-43-9	0.318	0.0441	0.110		2
06131	Chromium	7440-47-3	28.9	0.132	0.441		2
06132	Cobalt	7440-48-4	10.3	0.0221	0.110		2
06133	Copper	7440-50-8	17.6	0.0728	0.441		2
06135	Lead	7439-92-1	12.7	0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.509	0.0551	0.110		2
06139	Nickel	7440-02-0	21.8	0.110	0.441		2
06141	Selenium	7782-49-2	0.114 J	0.0441	0.441		2
06142	Silver	7440-22-4	0.0617 J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.358	0.0331	0.110		2
06148	Vanadium	7440-62-2	74.2	0.0243	0.110		2
06149	Zinc	7440-66-6	88.4	0.618	3.31		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.111		1
Wet Chemistry							
		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.9	0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.3 J	0.90	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.7		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.70 J	0.22	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.54		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.24	0.0100	0.0100		1
Wet Chemistry							
		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	11.1	0.50	0.50		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	%	
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 20:39	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 15:38	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 11:01	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 00:18	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 19:58	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 10:41	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 06:28	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 06:41	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 07:23	Richard A Shober	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:58	Heather E Williams	10
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:43	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:49	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 17:07	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL016 SDG#: DE159-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:31	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:29	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:28	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:28	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:29	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:29	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:42	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:24	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 18:54	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL016 SDG#: DE159-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 16:22	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:35	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzo(a)anthracene	56-55-3	130	J 18	180		1
04688	Benzo(a)pyrene	50-32-8	100	J 18	180		1
04688	Benzo(b)fluoranthene	205-99-2	180	J 18	180		1
04688	Benzo(g,h,i)perylene	191-24-2	41	J 18	180		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Butylbenzylphthalate	85-68-7	28	J 18	180		1
04688	Di-n-butylphthalate	84-74-2	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	74	U 74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Chrysene	218-01-9	100	J 18	180		1
04688	Dibenz(a,h)anthracene	53-70-3	22	J 18	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	Diethylphthalate	84-66-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	Dimethylphthalate	131-11-3	18	U 18	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	37	J 18	370		1
04688	Fluoranthene	206-44-0	120	J 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U 74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	53	J 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1

3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	74	U 74	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	18	U 18	180		1
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	Pyrene	129-00-0	170	J 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.3	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.3	5
10138	Anthracene	120-12-7	2.2	J 1.9	9.3	5
10138	Benzo(k)fluoranthene	207-08-9	18	3.7	9.3	5
10138	Fluorene	86-73-7	3.7	U 3.7	9.3	5
10138	1-Methylnaphthalene	90-12-0	3.7	U 3.7	9.3	5
10138	2-Methylnaphthalene	91-57-6	3.7	U 3.7	9.3	5
10138	Naphthalene	91-20-3	3.7	U 3.7	9.3	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.3	5
10138	Phenanthrene	85-01-8	5.9	J 3.7	9.3	5

Reporting limits were raised due to interference from the sample matrix.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	4.0
10401	Dalapon	75-99-0	4.9	U 4.9	10
10401	2,4-DB	94-82-6	0.69	U 0.69	1.9
10401	Dicamba	1918-00-9	0.45	U 0.45	1.3

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	Dinoseb	88-85-7	0.89 U	0.89	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89 U	0.89	1.9		1
10401	MCPA	94-74-6	97 J	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84 U	84	280		1
10401	2,4,5-T	93-76-5	0.22	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.18 J	0.084	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.074 U	0.074	0.18		1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.18		1
01363	Beta BHC	319-85-7	0.067 U	0.067	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.18		1
01363	Chlordane	57-74-9	0.89 U	0.89	3.8		1
01363	p,p-DDD	72-54-8	0.074 U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.49 U	0.49	0.49		1
01363	p,p-DDT	50-29-3	12	0.74	3.8		10
01363	Delta BHC	319-86-8	0.040 U	0.040	0.18		1
01363	Dieldrin	60-57-1	2.2 U	2.2	3.8		10
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.18		1
01363	Endosulfan II	33213-65-9	0.074 U	0.074	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074 U	0.074	0.38		1
01363	Endrin	72-20-8	0.074 U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074 U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.074 U	0.074	0.38		1
01363	Heptachlor	76-44-8	0.067 U	0.067	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.28 U	0.28	0.28		1
01363	Methoxychlor	72-43-5	1.1 U	1.1	1.8		1
01363	Mirex	2385-85-5	0.48 U	0.48	0.48		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.4		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of DDT detected in the reextract is 7.0 ug/kg.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	5.6 U	5.6	18		5
10225	Aroclor 5442	12642-23-8	5.6 U	5.6	18		5
10225	Aroclor 5460	11126-42-4	5.6 U	5.6	18		5
10225	PCB-1016	12674-11-2	1.8 U	1.8	9.5		5
10225	PCB-1221	11104-28-2	1.8 U	1.8	9.5		5
10225	PCB-1232	11141-16-5	1.8 U	1.8	9.5		5
10225	PCB-1242	53469-21-9	1.8 U	1.8	9.5		5
10225	PCB-1248	12672-29-6	1.8 U	1.8	9.5		5
10225	PCB-1254	11097-69-1	1.8 U	1.8	9.5		5
10225	PCB-1260	11096-82-5	32	2.2	9.5		5
10225	PCB-1262	37324-23-5	1.8 U	1.8	9.5		5
10225	PCB-1268	11100-14-4	1.8 U	1.8	9.5		5
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	29,000	5.58	22.2		1
07914	Boron	7440-42-8	0.987 U	0.987	5.54		1
01650	Calcium	7440-70-2	12,200	6.80	22.2		1
01654	Iron	7439-89-6	32,400	10.4	44.3		2
01656	Lithium	7439-93-2	25.5	0.24	2.2		1
01657	Magnesium	7439-95-4	6,910	2.82	11.1		1
06958	Manganese	7439-96-5	393	0.0865	0.554		1
10145	Phosphorus	7723-14-0	454	0.621	11.1		1
01662	Potassium	7440-09-7	4,510	20.0	55.4		1
01667	Sodium	7440-23-5	129	41.4	111		1
07968	Strontium	7440-24-6	45.2	0.0687	0.554		1
06969	Tin	7440-31-5	2.96 J	1.11	11.1		1
06970	Titanium	7440-32-6	1,500	0.421	1.11		1
10146	Zirconium	7440-67-7	5.80	0.931	5.54		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.365	0.0652	0.217		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.77	0.0870	0.435		2
06126	Barium	7440-39-3	140	0.117	0.435		2
06127	Beryllium	7440-41-7	0.880	0.0174	0.109		2
06128	Cadmium	7440-43-9	0.391	0.0435	0.109		2
06131	Chromium	7440-47-3	25.4	0.130	0.435		2
06132	Cobalt	7440-48-4	9.01	0.0217	0.109		2
06133	Copper	7440-50-8	24.4	0.0718	0.435		2
06135	Lead	7439-92-1	17.4	0.0113	0.217		2
06138	Molybdenum	7439-98-7	0.929	0.0544	0.109		2
06139	Nickel	7440-02-0	25.5	0.109	0.435		2
06141	Selenium	7782-49-2	0.116 J	0.0435	0.435		2
06142	Silver	7440-22-4	0.0786 J	0.0130	0.109		2
06145	Thallium	7440-28-0	0.449	0.0326	0.109		2
06148	Vanadium	7440-62-2	90.3	0.0239	0.109		2
06149	Zinc	7440-66-6	133	0.609	3.26		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
00159	Mercury	SW-846 7471A 7439-97-6	mg/kg 0.0031 U	mg/kg 0.0031	mg/kg 0.109	mg/kg	1
Wet Chemistry							
07332	11a Anions by 300.0 - Fluoride	EPA 300.0 16984-48-8	mg/kg 2.0	mg/kg 0.90	mg/kg 1.1	mg/kg	1
10147	7a Perchlorate EPA 314.0	EPA 314.0 14797-73-0	ug/kg 10.1 U	ug/kg 10.1	ug/kg 33.6	ug/kg	1
05892	3a Cr VI by EPA 7199	SW-846 7199 18540-29-9	mg/kg 0.38 J	mg/kg 0.22	mg/kg 1.1	mg/kg	1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.10	0.0100	0.0100		1
Wet Chemistry							
11624	Moisture Content by 160.3	EPA 160.3 modified n.a.	% 10.7	% 0.50	% 0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:04	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 11:32	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 11:09	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:07	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:21	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 07:41	Richard A Shober	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL017 SDG#: DE159-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 09:02	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:51	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:51	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:51	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:06	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:01	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:38	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 19:16	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:27	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL017 SDG#: DE159-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 9

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	193 U	193	385		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	21	J 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-94-1	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	380		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	580		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.8	U 3.8	9.6	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.6	5
10138	Anthracene	120-12-7	1.9	U 1.9	9.6	5
10138	Benzo(a)anthracene	56-55-3	5.2	J 3.8	9.6	5
10138	Benzo(a)pyrene	50-32-8	6.2	J 3.8	9.6	5
10138	Benzo(b)fluoranthene	205-99-2	12	3.8	9.6	5
10138	Benzo(g,h,i)perylene	191-24-2	4.8	J 3.8	9.6	5
10138	Benzo(k)fluoranthene	207-08-9	4.6	J 3.8	9.6	5
10138	Chrysene	218-01-9	6.8	J 1.9	9.6	5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U 3.8	9.6	5
10138	Fluoranthene	206-44-0	11	3.8	9.6	5
10138	Fluorene	86-73-7	3.8	U 3.8	9.6	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U 3.8	9.6	5
10138	1-Methylnaphthalene	90-12-0	3.8	U 3.8	9.6	5
10138	2-Methylnaphthalene	91-57-6	3.8	U 3.8	9.6	5
10138	Naphthalene	91-20-3	3.8	U 3.8	9.6	5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U 3.8	9.6	5
10138	Phenanthrene	85-01-8	7.2	J 3.8	9.6	5
10138	Pyrene	129-00-0	8.4	J 3.8	9.6	5

Reporting limits were raised due to interference from the sample matrix.

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U 67	130
					1000000 0
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U 45	130
					1000000 0

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	89 U	89	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	89 U	89	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	330	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	130	1000000 0	1
10132	Nitroglycerin	55-63-0	890 U	890	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	89 U	89	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	89 U	89	130	1000000 0	1
10132	PETN	78-11-5	890 U	890	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	130	1000000 0	1
10132	Tetryl	479-45-8	68 U	68	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	130	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1 U	5.1	10		1
10401	2,4-DB	94-82-6	0.72 U	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93 U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93 U	0.93	2.0		1
10401	MCPA	94-74-6	88 U	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87 U	87	290		1
10401	2,4,5-T	93-76-5	0.095 U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087 U	0.087	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

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Suite 210
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Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	690 U	690	1,700		1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	0.92 U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.12 U	0.12	0.39		1
01363	p,p-DDT	50-29-3	0.70	0.076	0.39		1
01363	Delta BHC	319-86-8	0.042 U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.076 U	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39		1
01363	Endrin	72-20-8	0.076 U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.10 U	0.10	0.39		1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.21 U	0.21	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

DDT was not detected in the reextract.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	1.5 J	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0	1
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0	1
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0	1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0	1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0	1
10225	PCB-1260	11096-82-5	5.8	0.45	2.0	1

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.93 U	0.93	2.8		2
10199	EFH (C15-C20)	n.a.	5.4	0.93	2.8		2
10199	EFH (C21-C30)	n.a.	21	0.93	2.8		2
10199	EFH (C30 - C40)	n.a.	61	0.93	2.8		2
10199	EFH (C8-C11)	n.a.	0.93 U	0.93	2.8		2
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120 U	120	580		1
10501	Isopropanol	67-63-0	120 U	120	580		1
10501	Methanol	67-56-1	120 U	120	580		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.8 U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8 U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8 U	5.8	12		1
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.1		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.1		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.1		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	36,100	5.67	22.5		1
07914	Boron	7440-42-8	1.80 J	1.00	5.63		1
01650	Calcium	7440-70-2	11,000	6.90	22.5		1
01654	Iron	7439-89-6	34,200	10.6	45.1		2
01656	Lithium	7439-93-2	30.7	0.25	2.3		1
01657	Magnesium	7439-95-4	7,900	2.86	11.3		1
06958	Manganese	7439-96-5	433	0.0879	0.563		1
10145	Phosphorus	7723-14-0	297	0.631	11.3		1
01662	Potassium	7440-09-7	4,540	20.3	56.3		1
01667	Sodium	7440-23-5	188	42.0	113		1
07968	Strontium	7440-24-6	49.1	0.0698	0.563		1
06969	Tin	7440-31-5	3.04 J	1.13	11.3		1
06970	Titanium	7440-32-6	1,680	0.428	1.13		1
10146	Zirconium	7440-67-7	7.71	0.946	5.63		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.383	0.0682	0.227		2

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.55	0.0910	0.455		2
06126	Barium	7440-39-3	183	0.307	1.14		5
06127	Beryllium	7440-41-7	1.15	0.0182	0.114		2
06128	Cadmium	7440-43-9	0.417	0.0455	0.114		2
06131	Chromium	7440-47-3	32.6	0.136	0.455		2
06132	Cobalt	7440-48-4	10.2	0.0227	0.114		2
06133	Copper	7440-50-8	22.0	0.0751	0.455		2
06135	Lead	7439-92-1	14.7	0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.636	0.0569	0.114		2
06139	Nickel	7440-02-0	29.4	0.114	0.455		2
06141	Selenium	7782-49-2	0.144 J	0.0455	0.455		2
06142	Silver	7440-22-4	0.0757 J	0.0136	0.114		2
06145	Thallium	7440-28-0	0.497	0.0341	0.114		2
06148	Vanadium	7440-62-2	98.3	0.0250	0.114		2
06149	Zinc	7440-66-6	96.9	0.637	3.41		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.110		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	6.2	0.93	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	2.0	0.93	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.8		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.84 J	0.23	1.2		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.57		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.14	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	13.8	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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SL019 SDG#: DE159-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 16:55	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:31	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 12:02	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 02:26	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 20:08	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 11:37	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:48	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:00	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:08	Heather E Williams	2
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:02	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 14:52	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:34	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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SL019 SDG#: DE159-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:25	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:30	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:30	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:32	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:32	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:43	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:52	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 19:38	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:39	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:36	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL019 SDG#: DE159-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	194 U	194	388		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	190		1
04688	4-Chloroaniline	106-47-8	78	U 78	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	390	U 390	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	78	U 78	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	39	U 39	190		1
04688	4-Methylphenol	106-44-5	39	U 39	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	39	U 39	190		1
04688	4-Nitroaniline	100-01-6	78	U 78	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	580		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76 U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9		1
10138	Anthracene	120-12-7	0.42 J	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.7 J	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	3.1	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	4.9	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.7 J	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	5.4	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9 U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9 U	6.9	21		1
10138	Chrysene	218-01-9	3.1	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9 U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9 U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9 U	6.9	21		1
10138	Fluoranthene	206-44-0	4.5	0.76	1.9		1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.6 J	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21		1
10138	Phenanthrene	85-01-8	1.9 J	0.76	1.9		1
10138	Pyrene	129-00-0	3.5	0.76	1.9		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68 U	68	140	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	46 U	46	140	1000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	91 U	91	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	91 U	91	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	46 U	46	140	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	46 U	46	140	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	46 U	46	140	10000000	1
10132	HMX	2691-41-0	110 U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	46 U	46	140	10000000	1
10132	Nitroglycerin	55-63-0	910 U	910	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	91 U	91	140	10000000	1
10132	3-Nitrotoluene	99-08-1	110 U	110	140	10000000	1
10132	4-Nitrotoluene	99-99-0	91 U	91	140	10000000	1
10132	PETN	78-11-5	910 U	910	2,700	10000000	1
10132	RDX	121-82-4	57 U	57	140	10000000	1
10132	Tetryl	479-45-8	70 U	70	140	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	46 U	46	140	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	46 U	46	140	10000000	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1 U	5.1	10		1
10401	2,4-DB	94-82-6	0.72 U	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93 U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93 U	0.93	2.0		1
10401	MCPA	94-74-6	100 J	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87 U	87	290		1
10401	2,4,5-T	93-76-5	0.095 U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087 U	0.087	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	690 U	690	1,700		1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.077 U	0.077	0.19		1
01363	Alpha BHC	319-84-6	0.040 U	0.040	0.19		1
01363	Beta BHC	319-85-7	0.070 U	0.070	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.040 U	0.040	0.19		1
01363	Chlordane	57-74-9	1.1 J	0.93	4.0		1
01363	p,p-DDD	72-54-8	0.077 U	0.077	0.40		1
01363	p,p-DDE	72-55-9	0.12 U	0.12	0.40		1
01363	p,p-DDT	50-29-3	1.0	0.077	0.40		1
01363	Delta BHC	319-86-8	0.042 U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.077 U	0.077	0.40		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.26 U	0.26	0.40		1
01363	Endosulfan Sulfate	1031-07-8	0.077 U	0.077	0.40		1
01363	Endrin	72-20-8	0.094 U	0.094	0.40		1
01363	Endrin Aldehyde	7421-93-4	0.094 U	0.094	0.40		1
01363	Endrin Ketone	53494-70-5	0.077 U	0.077	0.40		1
01363	Heptachlor	76-44-8	0.070 U	0.070	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.047 U	0.047	0.19		1
01363	Methoxychlor	72-43-5	0.40 U	0.40	1.9		1
01363	Mirex	2385-85-5	0.10 U	0.10	0.40		1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.7		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of DDT detected in the reextract is .24 ug/kg. Chlordane was not detected in the reextract.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	9.7	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0	1
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0	1
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0	1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0	1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1260	11096-82-5	6.8	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.47 U	0.47	1.4		1
10199	EFH (C15-C20)	n.a.	3.9	0.47	1.4		1
10199	EFH (C21-C30)	n.a.	20	0.47	1.4		1
10199	EFH (C30 - C40)	n.a.	26	0.47	1.4		1
10199	EFH (C8-C11)	n.a.	0.47 U	0.47	1.4		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120 U	120	580		1
10501	Isopropanol	67-63-0	120 U	120	580		1
10501	Methanol	67-56-1	120 U	120	580		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.8 U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8 U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8 U	5.8	12		1
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.1		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.1		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.1		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	38,800	5.80	23.1		1
07914	Boron	7440-42-8	1.71 J	1.03	5.76		1
01650	Calcium	7440-70-2	9,700	7.07	23.1		1
01654	Iron	7439-89-6	34,400	10.9	46.1		2
01656	Lithium	7439-93-2	32.3	0.25	2.3		1
01657	Magnesium	7439-95-4	8,080	2.93	11.5		1
06958	Manganese	7439-96-5	370	0.0899	0.576		1
10145	Phosphorus	7723-14-0	239	0.645	11.5		1
01662	Potassium	7440-09-7	4,470	20.7	57.6		1
01667	Sodium	7440-23-5	163	43.0	115		1
07968	Strontium	7440-24-6	46.6	0.0715	0.576		1
06969	Tin	7440-31-5	2.96 J	1.15	11.5		1
06970	Titanium	7440-32-6	1,700	0.438	1.15		1
10146	Zirconium	7440-67-7	7.90	0.968	5.76		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.351	0.0685	0.228		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.36	0.0913	0.457		2
06126	Barium	7440-39-3	204	0.123	0.457		2
06127	Beryllium	7440-41-7	1.02	0.0183	0.114		2
06128	Cadmium	7440-43-9	0.458	0.0457	0.114		2
06131	Chromium	7440-47-3	29.2	0.137	0.457		2
06132	Cobalt	7440-48-4	9.04	0.0228	0.114		2
06133	Copper	7440-50-8	21.0	0.0753	0.457		2
06135	Lead	7439-92-1	14.7	0.0119	0.228		2
06138	Molybdenum	7439-98-7	0.632	0.0571	0.114		2
06139	Nickel	7440-02-0	28.4	0.114	0.457		2
06141	Selenium	7782-49-2	0.104 J	0.0457	0.457		2
06142	Silver	7440-22-4	0.0740 J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.463	0.0342	0.114		2
06148	Vanadium	7440-62-2	96.6	0.0251	0.114		2
06149	Zinc	7440-66-6	89.9	0.639	3.42		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.111		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	5.6	0.93	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.5 J	0.93	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.5 U	10.5	34.9		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.81 J	0.23	1.2		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.56		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.09	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	14.1	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL021 SDG#: DE159-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:13	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:58	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 17:23	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 03:08	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 20:17	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 12:04	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 08:15	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:18	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 17:18	Heather E Williams	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:13	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:15	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 15:37	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:38	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL021 SDG#: DE159-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:31	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:31	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:45	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:18	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 23:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 21:28	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:50	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:37	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 9 of 9

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL021 SDG#: DE159-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	19.1 U	19.1	38.3		1
The surrogate recoveries are outside of QC limits. The matrix spike sample was analyzed and surrogate recoveries are again outside of QC limits, indicating a matrix effect.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	27	J 19	380		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
The LCS and/or LCS recovery are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:							
2-nitrophenol							
4-bromophenyl-phenylether							
hexachlorobenzene							
hexachlorobutadiene							
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U 0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U 0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	2.0	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U 0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U 0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21		1
10138	Chrysene	218-01-9	0.96	J 0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U 0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U 6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U 6.9	21		1
10138	Fluoranthene	206-44-0	0.76	U 0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U 0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U 0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U 0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U 0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U 0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U 0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U 6.9	21		1
10138	Phenanthrene	85-01-8	0.76	U 0.76	1.9		1
10138	Pyrene	129-00-0	0.76	U 0.76	1.9		1

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U 68	140
					1000000 0

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 9

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45 U	45	140	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90 U	90	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90 U	90	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	140	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	140	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	140	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	140	1000000 0	1
10132	Nitroglycerin	55-63-0	900 U	900	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	90 U	90	140	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	140	1000000 0	1
10132	4-Nitrotoluene	99-99-0	90 U	90	140	1000000 0	1
10132	PETN	78-11-5	900 U	900	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	140	1000000 0	1
10132	Tetryl	479-45-8	69 U	69	140	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	140	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	140	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.1		1
10401	Dalapon	75-99-0	5.1 U	5.1	10		1
10401	2,4-DB	94-82-6	0.71 U	0.71	2.0		1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92 U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92 U	0.92	2.0		1
10401	MCPA	94-74-6	87 U	87	290		1
10401	MCPP (Mecoprop)	93-65-2	86 U	86	290		1
10401	2,4,5-T	93-76-5	0.094 U	0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.16 J	0.086	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent

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Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
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Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
the lowest reporting limits attainable.							
HPLC Organics			SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg
04173	25a Formaldehyde	8315A	50-00-0	690 U	690	1,700	1
Pesticides/PCBs			SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg
01363	Aldrin	309-00-2	0.076 U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	0.98 J	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.076 U	0.076	0.39		1
01363	p,p-DDT	50-29-3	0.52	0.076	0.39		1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.11 J	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39		1
01363	Endrin	72-20-8	0.076 U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.076 U	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.12 J	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

The concentration of DDT detected in the reextract is .17 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.

Pesticides/PCBs			SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.45 U	0.45	1.9		1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	4.6 U	4.6	14		10
10199	EFH (C15-C20)	n.a.	6.4 J	4.6	14		10
10199	EFH (C21-C30)	n.a.	60	4.6	14		10
10199	EFH (C30 - C40)	n.a.	290	4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6 U	4.6	14		10
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	570		1
10501	Isopropanol	67-63-0	110 U	110	570		1
10501	Methanol	67-56-1	110 U	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7 U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7 U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7 U	5.7	11		1
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	30,200	5.66	22.5		1
07914	Boron	7440-42-8	2.82 J	1.00	5.63		1
01650	Calcium	7440-70-2	18,500	6.90	22.5		1
01654	Iron	7439-89-6	32,000	10.6	45.0		2
01656	Lithium	7439-93-2	26.1	0.25	2.3		1
01657	Magnesium	7439-95-4	6,650	2.86	11.3		1
06958	Manganese	7439-96-5	451	0.0878	0.563		1
10145	Phosphorus	7723-14-0	357	0.630	11.3		1
01662	Potassium	7440-09-7	4,400	20.3	56.3		1
01667	Sodium	7440-23-5	143	42.0	113		1
07968	Strontium	7440-24-6	41.8	0.0698	0.563		1
06969	Tin	7440-31-5	3.22 J	1.13	11.3		1
06970	Titanium	7440-32-6	1,660	0.428	1.13		1
10146	Zirconium	7440-67-7	6.98	0.945	5.63		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.510	0.0682	0.227		2

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Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.16	0.0909	0.455		2
06126	Barium	7440-39-3	199	0.123	0.455		2
06127	Beryllium	7440-41-7	1.01	0.0182	0.114		2
06128	Cadmium	7440-43-9	0.727	0.0455	0.114		2
06131	Chromium	7440-47-3	30.1	0.136	0.455		2
06132	Cobalt	7440-48-4	13.0	0.0227	0.114		2
06133	Copper	7440-50-8	22.8	0.0750	0.455		2
06135	Lead	7439-92-1	20.0	0.0118	0.227		2
06138	Molybdenum	7439-98-7	1.50	0.0568	0.114		2
06139	Nickel	7440-02-0	28.9	0.114	0.455		2
06141	Selenium	7782-49-2	0.232 J	0.0455	0.455		2
06142	Silver	7440-22-4	0.0712 J	0.0136	0.114		2
06145	Thallium	7440-28-0	0.491	0.0341	0.114		2
06148	Vanadium	7440-62-2	91.4	0.0250	0.114		2
06149	Zinc	7440-66-6	162	0.637	3.41		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0463 J	0.0032	0.110		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.7	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.6 J	0.92	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.4		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.74 J	0.23	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.55		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.04	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
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Collected: 05/23/2011 09:25

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SL022 SDG#: DE159-13BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 21:32	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 05:37	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 15:55	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 03:50	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 20:27	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 08:51	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 08:43	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:37	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 19:23	Heather E Williams	10
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:28	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:28	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 17:52	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:06	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 06:58	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 06:58	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 06:58	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:46	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:07	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:00	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:07	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:41	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	229	19.1	38.3		1
The surrogate recoveries are outside of QC limits. The background sample was analyzed and surrogate recoveries are again outside of QC limits, indicating a matrix effect.							
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,800	19	190		1
04688	Acenaphthylene	208-96-8	1,900	19	190		1
04688	Aniline	62-53-3	1,400	190	570		1
04688	Anthracene	120-12-7	1,900	19	190		1
04688	Benidine	92-87-5	2,500	J 1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,900	19	190		1
04688	Benzo(a)pyrene	50-32-8	1,900	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,900	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,900	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800	19	190		1
04688	Benzoic acid	65-85-0	1,100	190	570		1
04688	Benzyl alcohol	100-51-6	2,100	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700	19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,800	19	190		1
04688	Carbazole	86-74-8	1,900	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	2,100	38	190		1
04688	4-Chloroaniline	106-47-8	1,500	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,700	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,600	19	190		1
04688	2-Chloronaphthalene	91-58-7	2,700	19	190		1
04688	2-Chlorophenol	95-57-8	1,900	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900	38	190		1
04688	Chrysene	218-01-9	1,900	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,900	19	190		1
04688	Dibenzofuran	132-64-9	1,900	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,500	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,400	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,500	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,500	110	380		1
04688	2,4-Dichlorophenol	120-83-2	2,000	19	190		1
04688	Diethylphthalate	84-66-2	1,900	19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,800	38	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000	38	190		1
04688	Dimethylphthalate	131-11-3	1,800	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,500	190	570		1
04688	2,4-Dinitrophenol	51-28-5	2,500	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	2,100	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,900	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,800	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,200	19	380		1
04688	Fluoranthene	206-44-0	1,700	19	190		1
04688	Fluorene	86-73-7	1,900	19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorobenzene	118-74-1	1,800	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,300	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,600	190	570		1
04688	Hexachloroethane	67-72-1	1,400	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,900	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,700	19	190		1
04688	2-Methylphenol	95-48-7	1,900	38	190		1
04688	4-Methylphenol	106-44-5	2,100	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,100	19	190		1
04688	3-Nitroaniline	99-09-2	2,100	38	190		1
04688	4-Nitroaniline	100-01-6	1,700	76	190		1
04688	Nitrobenzene	98-95-3	1,700	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	1,800	190	570		1
04688	N-Nitrosodimethylamine	62-75-9	1,600	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,600	190	570		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	2,000	19	190		1
04688	Pyrene	129-00-0	2,100	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,600	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	1,900	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	1,900	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	39	0.76	1.9		1
10138	Acenaphthylene	208-96-8	38	0.38	1.9		1
10138	Anthracene	120-12-7	40	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	37	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	48	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	53	0.76	1.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Benzo(g,h,i)perylene	191-24-2	32	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	49	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	40	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	47	6.9	21		1
10138	Chrysene	218-01-9	38	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	37	0.76	1.9		1
10138	Diethylphthalate	84-66-2	41	6.9	21		1
10138	Dimethylphthalate	131-11-3	40	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	39	6.9	21		1
10138	Fluoranthene	206-44-0	43	0.76	1.9		1
10138	Fluorene	86-73-7	40	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	35	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	39	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	35	0.76	1.9		1
10138	Naphthalene	91-20-3	37	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	39	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	53	6.9	21		1
10138	Phenanthrene	85-01-8	39	0.76	1.9		1
10138	Pyrene	129-00-0	34	0.76	1.9		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,600	69	140		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,600	46	140		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	92 U	92	280		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	92 U	92	280		1
10132	1,3-Dinitrobenzene	99-65-0	2,700	46	140		1
10132	2,4-Dinitrotoluene	121-14-2	2,500	46	140		1
10132	2,6-Dinitrotoluene	606-20-2	2,500	46	140		1
10132	HMX	2691-41-0	2,300	110	340		1
10132	Nitrobenzene	98-95-3	2,600	46	140		1
10132	Nitroglycerin	55-63-0	56,000	920	2,800		1
10132	2-Nitrotoluene	88-72-2	2,400	92	140		1
10132	3-Nitrotoluene	99-08-1	2,600	110	140		1
10132	4-Nitrotoluene	99-99-0	2,400	92	140		1
10132	PETN	78-11-5	70,000	920	2,800		1
10132	RDX	121-82-4	2,100	57	140		1
10132	Tetryl	479-45-8	2,100	70	140		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,500	46	140		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,600	46	140		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	9.7	1.4	4.1		1
10401	Dalapon	75-99-0	14	5.0	10		1
10401	2,4-DB	94-82-6	5.9	0.71	1.9		1
10401	Dicamba	1918-00-9	0.82 J	0.46	1.4		1
10401	Dinoseb	88-85-7	1.4 J	0.92	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	9.6	0.92	1.9		1
10401	MCPA	94-74-6	850	87	290		1
10401	MCPP (Mecoprop)	93-65-2	670	86	290		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	0.67	0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.72	0.086	0.20		1
The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde	8315A 50-00-0	5,600	690	1,700		1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.15 J	0.076	0.20		1
01363	Alpha BHC	319-84-6	0.22	0.039	0.20		1
01363	Beta BHC	319-85-7	0.17 J	0.069	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.24	0.039	0.20		1
01363	Chlordane	57-74-9	0.92 U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.39	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.46	0.076	0.39		1
01363	p,p-DDT	50-29-3	1.2	0.076	0.39		1
01363	Delta BHC	319-86-8	0.18 J	0.041	0.20		1
01363	Dieldrin	60-57-1	0.57	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.14 J	0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.23 J	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.42	0.076	0.39		1
01363	Endrin	72-20-8	0.37 J	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.30 J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.25 J	0.076	0.39		1
01363	Heptachlor	76-44-8	0.26	0.069	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.16 J	0.039	0.20		1
01363	Methoxychlor	72-43-5	2.9	0.39	1.9		1
01363	Mirex	2385-85-5	0.076 U	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	2.2 J	1.1	3.8	1
10225	PCB-1016	12674-11-2	17	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9	1
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	19	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	4.6 U	4.6	14		10
10199	EFH (C15-C20)	n.a.	7.0 J	4.6	14		10
10199	EFH (C21-C30)	n.a.	55	4.6	14		10
10199	EFH (C30 - C40)	n.a.	240	4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6 U	4.6	14		10
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	1,900	110	570		1
10501	Isopropanol	67-63-0	2,000	110	570		1
10501	Methanol	67-56-1	2,000	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	96	5.7	11		1
08283	Ethylene glycol	107-21-1	160	5.7	11		1
08283	Propylene glycol	57-55-6	160	5.7	11		1
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 J	1.5	4.0		1
10318	o-Terphenyl	84-15-1	1.9 J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.8 J	1.7	4.0		1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	33,500	5.55	22.1		1
07914	Boron	7440-42-8	220	0.983	5.52		1
01650	Calcium	7440-70-2	8,290	6.77	22.1		1
01654	Iron	7439-89-6	32,800	10.4	44.2		2
01656	Lithium	7439-93-2	137	0.24	2.2		1
01657	Magnesium	7439-95-4	7,140	2.80	11.0		1
06958	Manganese	7439-96-5	527	0.0861	0.552		1
10145	Phosphorus	7723-14-0	498	0.618	11.0		1
01662	Potassium	7440-09-7	6,180	19.9	55.2		1
01667	Sodium	7440-23-5	1,230	41.2	110		1
07968	Strontium	7440-24-6	144	0.0684	0.552		1
06969	Tin	7440-31-5	390	1.10	11.0		1
06970	Titanium	7440-32-6	1,900	0.420	1.10		1
10146	Zirconium	7440-67-7	111	0.927	5.52		1

*=This limit was used in the evaluation of the final result

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Analysis Report

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.31	0.0675	0.225		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.2	0.0900	0.450		2
06126	Barium	7440-39-3	202	0.122	0.450		2
06127	Beryllium	7440-41-7	1.88	0.0180	0.113		2
06128	Cadmium	7440-43-9	1.88	0.0450	0.113		2
06131	Chromium	7440-47-3	41.3	0.135	0.450		2
06132	Cobalt	7440-48-4	64.0	0.0225	0.113		2
06133	Copper	7440-50-8	34.2	0.0743	0.450		2
06135	Lead	7439-92-1	24.1	0.0117	0.225		2
06138	Molybdenum	7439-98-7	15.2	0.0563	0.113		2
06139	Nickel	7440-02-0	46.7	0.113	0.450		2
06141	Selenium	7782-49-2	2.69	0.0450	0.450		2
06142	Silver	7440-22-4	14.3	0.0135	0.113		2
06145	Thallium	7440-28-0	0.974	0.0338	0.113		2
06148	Vanadium	7440-62-2	105	0.0248	0.113		2
06149	Zinc	7440-66-6	199	0.630	3.38		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.231	0.0031	0.108		1
Wet Chemistry							
		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.9	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	12.0	0.92	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	681	10.3	34.4		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	45.7	1.1	5.7		5
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	5.9	0.20	0.55		1
Wet Chemistry							
		EPA 160.3 modified	%	%	%	%	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 21:49	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 06:03	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 16:30	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 04:33	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 20:36	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 09:19	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 09:10	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:55	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 19:48	Heather E Williams	10
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:43	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:53	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 18:37	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:17	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:07	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:08	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:08	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:07	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:07	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:48	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:35	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:44	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:19	Elyse P Brunstetter	5
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:43	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 1 of 8

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	231	19.1	38.3		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900	19	190		1
04688	Acenaphthylene	208-96-8	1,900	19	190		1
04688	Aniline	62-53-3	1,400	190	570		1
04688	Anthracene	120-12-7	1,900	19	190		1
04688	Benzidine	92-87-5	2,800	J 1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,900	19	190		1
04688	Benzo(a)pyrene	50-32-8	1,900	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,900	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,900	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800	19	190		1
04688	Benzoic acid	65-85-0	1,200	190	570		1
04688	Benzyl alcohol	100-51-6	2,200	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700	19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,800	19	190		1
04688	Carbazole	86-74-8	1,900	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	2,100	38	190		1
04688	4-Chloroaniline	106-47-8	1,600	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,700	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,800	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800	19	190		1
04688	2-Chloronaphthalene	91-58-7	1,600	19	190		1
04688	2-Chlorophenol	95-57-8	2,000	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900	38	190		1
04688	Chrysene	218-01-9	1,900	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,900	19	190		1
04688	Dibenzofuran	132-64-9	1,900	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,700	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,600	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,700	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,500	110	380		1
04688	2,4-Dichlorophenol	120-83-2	2,000	19	190		1
04688	Diethylphthalate	84-66-2	1,900	19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,800	38	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000	38	190		1
04688	Dimethylphthalate	131-11-3	1,900	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,300	190	570		1
04688	2,4-Dinitrophenol	51-28-5	2,000	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	2,100	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	2,000	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,800	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	19	380		1
04688	Fluoranthene	206-44-0	1,800	19	190		1
04688	Fluorene	86-73-7	2,000	19	190		1
04688	Hexachlorobenzene	118-74-1	1,800	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,500	76	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorocyclopentadiene	77-47-4	2,700	190	570		1
04688	Hexachloroethane	67-72-1	1,500	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	2,000	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,900	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,800	19	190		1
04688	2-Methylphenol	95-48-7	2,000	38	190		1
04688	4-Methylphenol	106-44-5	2,100	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,100	19	190		1
04688	3-Nitroaniline	99-09-2	2,100	38	190		1
04688	4-Nitroaniline	100-01-6	1,700	76	190		1
04688	Nitrobenzene	98-95-3	1,700	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	1,700	190	570		1
04688	N-Nitrosodimethylamine	62-75-9	1,700	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	2,000	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,600	190	570		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	2,100	19	190		1
04688	Pyrene	129-00-0	2,000	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,700	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	2,000	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	37	0.76	1.9		1
10138	Acenaphthylene	208-96-8	36	0.38	1.9		1
10138	Anthracene	120-12-7	39	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	38	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	48	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	54	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	28	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	50	0.76	1.9		1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Butylbenzylphthalate	85-68-7	42	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	45	6.9	21		1
10138	Chrysene	218-01-9	39	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	33	0.76	1.9		1
10138	Diethylphthalate	84-66-2	39	6.9	21		1
10138	Dimethylphthalate	131-11-3	38	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	39	6.9	21		1
10138	Fluoranthene	206-44-0	45	0.76	1.9		1
10138	Fluorene	86-73-7	39	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	32	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	36	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	32	0.76	1.9		1
10138	Naphthalene	91-20-3	34	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	37	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	54	6.9	21		1
10138	Phenanthrene	85-01-8	40	0.76	1.9		1
10138	Pyrene	129-00-0	36	0.76	1.9		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,500	69	140		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,500	46	140		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	92 U	92	280		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	92 U	92	280		1
10132	1,3-Dinitrobenzene	99-65-0	2,600	46	140		1
10132	2,4-Dinitrotoluene	121-14-2	2,500	46	140		1
10132	2,6-Dinitrotoluene	606-20-2	2,500	46	140		1
10132	HMX	2691-41-0	2,200	110	340		1
10132	Nitrobenzene	98-95-3	2,600	46	140		1
10132	Nitroglycerin	55-63-0	55,000	920	2,800		1
10132	2-Nitrotoluene	88-72-2	2,400	92	140		1
10132	3-Nitrotoluene	99-08-1	2,600	110	140		1
10132	4-Nitrotoluene	99-99-0	2,400	92	140		1
10132	PETN	78-11-5	67,000	920	2,800		1
10132	RDX	121-82-4	2,100	57	140		1
10132	Tetryl	479-45-8	1,800	70	140		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,400	46	140		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,500	46	140		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	8.9	1.4	4.1		1
10401	Dalapon	75-99-0	11	5.0	10		1
10401	2,4-DB	94-82-6	6.4	0.71	1.9		1
10401	Dicamba	1918-00-9	0.69 J	0.46	1.4		1
10401	Dinoseb	88-85-7	1.1 J	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	8.3	0.91	1.9		1
10401	MCPA	94-74-6	710	87	290		1
10401	MCPP (Mecoprop)	93-65-2	740	86	290		1
10401	2,4,5-T	93-76-5	0.56	0.093	0.20		1
10401	2,4,5-TP	93-72-1	0.64	0.086	0.20		1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

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14420 Albemarle Point Place
Suite 210
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Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde	8315A	50-00-0	5,600	690	1,700	1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.17 J	0.076	0.20		1
01363	Alpha BHC	319-84-6	0.23	0.039	0.20		1
01363	Beta BHC	319-85-7	0.20	0.069	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.24	0.039	0.20		1
01363	Chlordane	57-74-9	0.92 U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.42	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.37 J	0.076	0.39		1
01363	p,p-DDT	50-29-3	1.5	0.076	0.39		1
01363	Delta BHC	319-86-8	0.20	0.041	0.20		1
01363	Dieldrin	60-57-1	0.46	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.16 J	0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.39	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.42	0.076	0.39		1
01363	Endrin	72-20-8	0.41	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.25 J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.32 J	0.076	0.39		1
01363	Heptachlor	76-44-8	0.29	0.069	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.20	0.039	0.20		1
01363	Methoxychlor	72-43-5	3.8	0.39	1.9		1
01363	Mirex	2385-85-5	0.076 U	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.5		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	4.0	1.1	3.8	1
10225	PCB-1016	12674-11-2	21	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9	1
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9	1
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9	1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9	1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9	1
10225	PCB-1260	11096-82-5	21	0.45	1.9	1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

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SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	4.6 U	4.6	14		10
10199	EFH (C15-C20)	n.a.	8.1 J	4.6	14		10
10199	EFH (C21-C30)	n.a.	110	4.6	14		10
10199	EFH (C30 - C40)	n.a.	400	4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6 U	4.6	14		10
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	1,800	110	570		1
10501	Isopropanol	67-63-0	2,000	110	570		1
10501	Methanol	67-56-1	2,000	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	93	5.7	11		1
08283	Ethylene glycol	107-21-1	150	5.7	11		1
08283	Propylene glycol	57-55-6	160	5.7	11		1
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.5 J	1.5	4.0		1
10318	o-Terphenyl	84-15-1	1.8 J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.8 J	1.7	4.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	35,600	5.66	22.5		1
07914	Boron	7440-42-8	225	1.00	5.63		1
01650	Calcium	7440-70-2	9,590	6.90	22.5		1
01654	Iron	7439-89-6	31,600	10.6	45.0		2
01656	Lithium	7439-93-2	143	0.25	2.3		1
01657	Magnesium	7439-95-4	7,350	2.86	11.3		1
06958	Manganese	7439-96-5	468	0.0878	0.563		1
10145	Phosphorus	7723-14-0	458	0.630	11.3		1
01662	Potassium	7440-09-7	6,140	20.3	56.3		1
01667	Sodium	7440-23-5	1,240	42.0	113		1
07968	Strontium	7440-24-6	148	0.0698	0.563		1
06969	Tin	7440-31-5	393	1.13	11.3		1
06970	Titanium	7440-32-6	1,980	0.428	1.13		1
10146	Zirconium	7440-67-7	113	0.945	5.63		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.51	0.0675	0.225		2

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals			SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	11.4	0.0900	0.450		2
06126	Barium	7440-39-3	159	0.122	0.450		2
06127	Beryllium	7440-41-7	2.10	0.0180	0.113		2
06128	Cadmium	7440-43-9	2.25	0.0450	0.113		2
06131	Chromium	7440-47-3	39.7	0.135	0.450		2
06132	Cobalt	7440-48-4	64.0	0.0225	0.113		2
06133	Copper	7440-50-8	39.0	0.0743	0.450		2
06135	Lead	7439-92-1	28.4	0.0117	0.225		2
06138	Molybdenum	7439-98-7	17.3	0.0563	0.113		2
06139	Nickel	7440-02-0	45.2	0.113	0.450		2
06141	Selenium	7782-49-2	2.97	0.0450	0.450		2
06142	Silver	7440-22-4	16.4	0.0135	0.113		2
06145	Thallium	7440-28-0	1.17	0.0338	0.113		2
06148	Vanadium	7440-62-2	117	0.0248	0.113		2
06149	Zinc	7440-66-6	178	0.630	3.38		2
			SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg
00159	Mercury	7439-97-6	0.216	0.0032	0.112		1
Wet Chemistry			EPA 160.3 modified	%	%	%	%
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 22:07	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 06:30	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 17:02	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 05:15	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 20:46	James H Place	1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
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SL022 SDG#: DE159-13MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 09:46	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 09:24	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:14	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 20:13	Heather E Williams	10
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:06	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 19:22	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:20	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:10	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:52	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	30,700	5.72	22.7		1
07914	Boron	7440-42-8	1.87 J	1.01	5.68		1
01650	Calcium	7440-70-2	8,480	6.97	22.7		1
01654	Iron	7439-89-6	31,900	10.7	45.5		2
01656	Lithium	7439-93-2	26.6	0.25	2.3		1
01657	Magnesium	7439-95-4	6,920	2.89	11.4		1
06958	Manganese	7439-96-5	435	0.0887	0.568		1
10145	Phosphorus	7723-14-0	344	0.637	11.4		1
01662	Potassium	7440-09-7	4,400	20.5	56.8		1
01667	Sodium	7440-23-5	140	42.4	114		1
07968	Strontium	7440-24-6	39.3	0.0705	0.568		1
06969	Tin	7440-31-5	3.16 J	1.14	11.4		1
06970	Titanium	7440-32-6	1,620	0.432	1.14		1
10146	Zirconium	7440-67-7	6.80	0.955	5.68		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.296	0.0675	0.225		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.08	0.0900	0.450		2
06126	Barium	7440-39-3	139	0.122	0.450		2
06127	Beryllium	7440-41-7	0.776	0.0180	0.113		2
06128	Cadmium	7440-43-9	0.373	0.0450	0.113		2
06131	Chromium	7440-47-3	28.4	0.135	0.450		2
06132	Cobalt	7440-48-4	9.51	0.0225	0.113		2
06133	Copper	7440-50-8	17.1	0.0743	0.450		2
06135	Lead	7439-92-1	17.2	0.0117	0.225		2
06138	Molybdenum	7439-98-7	1.14	0.0563	0.113		2
06139	Nickel	7440-02-0	20.6	0.113	0.450		2
06141	Selenium	7782-49-2	0.139 J	0.0450	0.450		2
06142	Silver	7440-22-4	0.136	0.0135	0.113		2
06145	Thallium	7440-28-0	0.337	0.0338	0.113		2
06148	Vanadium	7440-62-2	67.4	0.0248	0.113		2
06149	Zinc	7440-66-6	152	0.630	3.38		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0155 J	0.0031	0.108		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.6	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2 J	0.92	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.4		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.88 J	0.23	1.1		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05895	17a Cyanide by 9012B	SW-846 9012B 57-12-5	mg/kg 0.20 U	mg/kg 0.20	mg/kg 0.57	mg/kg	1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.00	0.0100	0.0100		1
Wet Chemistry							
		EPA 160.3 modified	%	%	%	%	
11626	28a Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:13	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:04	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:06	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:06	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL022 SDG#: DE159-13DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:04	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:04	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:47	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:21	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:22	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:53	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:42	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	42.3	19.0	38.1		1
The surrogate standard n-nitrosodimethylamine-d6 was outside of the advisory QC windows.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	75	U 75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	75	U 75	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76 U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38 U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.2 J	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	1.8 J	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	4.8	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.0 J	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76 U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8 U	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	6.8 U	6.8	20		1
10138	Chrysene	218-01-9	1.5 J	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.8 U	6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8 U	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.8 U	6.8	20		1
10138	Fluoranthene	206-44-0	2.1	0.76	1.9		1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.88 J	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8 U	6.8	20		1
10138	Phenanthrene	85-01-8	0.88 J	0.76	1.9		1
10138	Pyrene	129-00-0	1.7 J	0.76	1.9		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67 U	67	130	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45 U	45	130	1000000	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90 U	90	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90 U	90	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	130	1000000 0	1
10132	Nitroglycerin	55-63-0	900 U	900	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	90 U	90	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	90 U	90	130	1000000 0	1
10132	PETN	78-11-5	900 U	900	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	130	1000000 0	1
10132	Tetryl	479-45-8	68 U	68	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	130	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.9 J	1.4	4.1		1
10401	Dalapon	75-99-0	5.0 U	5.0	10		1
10401	2,4-DB	94-82-6	0.70 U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45 U	0.45	1.4		1
10401	Dinoseb	88-85-7	0.91 U	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91 U	0.91	1.9		1
10401	MCPA	94-74-6	270 J	86	280		1
10401	MCPP (Mecoprop)	93-65-2	85 U	85	280		1
10401	2,4,5-T	93-76-5	0.093 U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085 U	0.085	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

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Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
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Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

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Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	680 U	680	1,700		1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.075 U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.068 U	0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	4.4	0.91	3.9		1
01363	p,p-DDD	72-54-8	0.075 U	0.075	0.39		1
01363	p,p-DDE	72-55-9	0.19 J	0.075	0.39		1
01363	p,p-DDT	50-29-3	0.48	0.075	0.39		1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.21 J	0.075	0.39		1
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	0.075 U	0.075	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.075 U	0.075	0.39		1
01363	Endrin	72-20-8	0.075 U	0.075	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.075 U	0.075	0.39		1
01363	Endrin Ketone	53494-70-5	0.075 U	0.075	0.39		1
01363	Heptachlor	76-44-8	0.068 U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.086 J	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.075 U	0.075	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.5		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Heptachlor epoxide, DDE, and dieldrin are not detected in the reextract. Endosulfan II is detected at .08 ug/kg and mirex is detected at .19 ug/kg in the reextract.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	1.6 J	1.1	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9	1
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9	1
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9	1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9	1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9	1
10225	PCB-1260	11096-82-5	1.6 J	0.44	1.9	1

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Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.46 U	0.46	1.4		1
10199	EFH (C15-C20)	n.a.	5.1	0.46	1.4		1
10199	EFH (C21-C30)	n.a.	11	0.46	1.4		1
10199	EFH (C30 - C40)	n.a.	40	0.46	1.4		1
10199	EFH (C8-C11)	n.a.	0.46 U	0.46	1.4		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	570		1
10501	Isopropanol	67-63-0	110 U	110	570		1
10501	Methanol	67-56-1	110 U	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7 U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7 U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7 U	5.7	11		1
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	32,300	5.52	22.0		1
07914	Boron	7440-42-8	2.70 J	0.977	5.49		1
01650	Calcium	7440-70-2	49,000	6.73	22.0		1
01654	Iron	7439-89-6	32,100	10.3	43.9		2
01656	Lithium	7439-93-2	28.7	0.24	2.2		1
01657	Magnesium	7439-95-4	7,310	2.79	11.0		1
06958	Manganese	7439-96-5	448	0.0856	0.549		1
10145	Phosphorus	7723-14-0	316	0.615	11.0		1
01662	Potassium	7440-09-7	4,250	19.8	54.9		1
01667	Sodium	7440-23-5	135	40.9	110		1
07968	Strontium	7440-24-6	51.8	0.0681	0.549		1
06969	Tin	7440-31-5	2.79 J	1.10	11.0		1
06970	Titanium	7440-32-6	1,570	0.417	1.10		1
10146	Zirconium	7440-67-7	7.12	0.922	5.49		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.353	0.0672	0.224		2

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Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.86	0.0895	0.448		2
06126	Barium	7440-39-3	183	0.121	0.448		2
06127	Beryllium	7440-41-7	1.01	0.0179	0.112		2
06128	Cadmium	7440-43-9	0.329	0.0448	0.112		2
06131	Chromium	7440-47-3	33.1	0.134	0.448		2
06132	Cobalt	7440-48-4	10.1	0.0224	0.112		2
06133	Copper	7440-50-8	20.1	0.0739	0.448		2
06135	Lead	7439-92-1	12.8	0.0116	0.224		2
06138	Molybdenum	7439-98-7	0.562	0.0560	0.112		2
06139	Nickel	7440-02-0	26.3	0.112	0.448		2
06141	Selenium	7782-49-2	0.0791 J	0.0448	0.448		2
06142	Silver	7440-22-4	0.0701 J	0.0134	0.112		2
06145	Thallium	7440-28-0	0.463	0.0336	0.112		2
06148	Vanadium	7440-62-2	87.2	0.0246	0.112		2
06149	Zinc	7440-66-6	86.5	0.627	3.36		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.112		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4	0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1 J	0.91	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.2		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.1 J	0.23	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.57		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	7.99	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	12.4	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

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Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

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SL023 SDG#: DE159-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:30	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 17:24	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 16:46	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 05:58	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 21:05	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 12:32	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 11:13	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:32	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 17:43	Heather E Williams	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 23:43	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:44	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 14:06	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:48	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1

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Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL023 SDG#: DE159-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:38	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:33	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:33	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:38	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:38	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:53	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:32	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 23:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 21:50	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 18:16	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201B	05/31/2011 19:45	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201B	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 9 of 9

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL023 SDG#: DE159-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,900		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	390	U 390	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	390		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	39	U 39	190		1
04688	4-Methylphenol	106-44-5	39	U 39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	39	U 39	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	580		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.8	U 3.8	9.6	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.6	5
10138	Anthracene	120-12-7	1.9	U 1.9	9.6	5
10138	Benzo(a)anthracene	56-55-3	3.8	U 3.8	9.6	5
10138	Benzo(a)pyrene	50-32-8	3.8	U 3.8	9.6	5
10138	Benzo(b)fluoranthene	205-99-2	13	3.8	9.6	5
10138	Benzo(g,h,i)perylene	191-24-2	3.8	U 3.8	9.6	5
10138	Benzo(k)fluoranthene	207-08-9	3.8	U 3.8	9.6	5
10138	Chrysene	218-01-9	6.8	J 1.9	9.6	5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U 3.8	9.6	5
10138	Fluoranthene	206-44-0	10	3.8	9.6	5
10138	Fluorene	86-73-7	3.8	U 3.8	9.6	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U 3.8	9.6	5
10138	1-Methylnaphthalene	90-12-0	3.8	U 3.8	9.6	5
10138	2-Methylnaphthalene	91-57-6	3.8	U 3.8	9.6	5
10138	Naphthalene	91-20-3	3.8	U 3.8	9.6	5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U 3.8	9.6	5
10138	Phenanthrene	85-01-8	4.8	J 3.8	9.6	5
10138	Pyrene	129-00-0	6.1	J 3.8	9.6	5

Reporting limits were raised due to interference from the sample matrix.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.7	J 1.4	4.2
10401	Dalapon	75-99-0	5.1	U 5.1	10
10401	2,4-DB	94-82-6	0.72	U 0.72	2.0
10401	Dicamba	1918-00-9	0.46	U 0.46	1.4
10401	Dinoseb	88-85-7	0.92	U 0.92	2.8
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U 0.92	2.0
10401	MCPA	94-74-6	230	J 88	290
10401	MCPP (Mecoprop)	93-65-2	87	U 87	290

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Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	0.095 U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.22	0.087	0.20		1
The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	1.2 J	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.14 J	0.076	0.39		1
01363	p,p-DDT	50-29-3	0.28 J	0.076	0.39		1
01363	Delta BHC	319-86-8	0.042 U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.076 U	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39		1
01363	Endrin	72-20-8	0.076 U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.17 J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.095 U	0.095	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. the original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate recoveries are low for the reextract. DDE, DDT, endrin aldehyde and chlordane are not detected in the reextract.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	3.4 J	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0	1

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Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	1.4 J	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	34,200	5.65	22.4		1
07914	Boron	7440-42-8	2.42 J	0.999	5.61		1
01650	Calcium	7440-70-2	7,210	6.88	22.4		1
01654	Iron	7439-89-6	33,900	10.6	44.9		2
01656	Lithium	7439-93-2	28.1	0.25	2.2		1
01657	Magnesium	7439-95-4	7,510	2.85	11.2		1
06958	Manganese	7439-96-5	466	0.0875	0.561		1
10145	Phosphorus	7723-14-0	335	0.629	11.2		1
01662	Potassium	7440-09-7	5,180	20.2	56.1		1
01667	Sodium	7440-23-5	138	41.9	112		1
07968	Strontium	7440-24-6	41.5	0.0696	0.561		1
06969	Tin	7440-31-5	3.06 J	1.12	11.2		1
06970	Titanium	7440-32-6	1,660	0.427	1.12		1
10146	Zirconium	7440-67-7	7.02	0.943	5.61		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.386	0.0673	0.224		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.16	0.0898	0.449		2
06126	Barium	7440-39-3	133	0.121	0.449		2
06127	Beryllium	7440-41-7	1.09	0.0180	0.112		2
06128	Cadmium	7440-43-9	0.491	0.0449	0.112		2
06131	Chromium	7440-47-3	30.3	0.135	0.449		2
06132	Cobalt	7440-48-4	9.27	0.0224	0.112		2
06133	Copper	7440-50-8	23.4	0.0741	0.449		2
06135	Lead	7439-92-1	16.6	0.0117	0.224		2
06138	Molybdenum	7439-98-7	0.649	0.0561	0.112		2
06139	Nickel	7440-02-0	29.8	0.112	0.449		2
06141	Selenium	7782-49-2	0.216 J	0.0449	0.449		2
06142	Silver	7440-22-4	0.0774 J	0.0135	0.112		2
06145	Thallium	7440-28-0	0.506	0.0337	0.112		2
06148	Vanadium	7440-62-2	97.1	0.0247	0.112		2
06149	Zinc	7440-66-6	140	0.629	3.37		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0038 J	0.0031	0.110		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 300.0							
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9	0.92	1.2	mg/kg	1
EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.7	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.53 J	0.23	1.2	mg/kg	1
SW-846 9045C modified							
00394	18a pH by 9045C	n.a.	7.74	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	Moisture Content by 160.3	n.a.	13.5	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 17:51	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 17:59	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 13:55	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 11:40	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:51	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL052 SDG#: DE159-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 09:05	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:55	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:55	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:55	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:02	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:46	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:12	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:22	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL052 SDG#: DE159-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190		1
04688	4-Chloroaniline	106-47-8	74	U 74	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	370		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	74	U 74	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	37	U 37	190		1
04688	4-Methylphenol	106-44-5	37	U 37	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	37	U 37	190		1
04688	4-Nitroaniline	100-01-6	74	U 74	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.2		5
10138	Acenaphthylene	208-96-8	1.8	U 1.8	9.2		5
10138	Anthracene	120-12-7	2.2	J 1.8	9.2		5
10138	Benzo(a)anthracene	56-55-3	5.9	J 3.7	9.2		5
10138	Benzo(a)pyrene	50-32-8	9.2	J 3.7	9.2		5
10138	Benzo(b)fluoranthene	205-99-2	34	3.7	9.2		5
10138	Benzo(g,h,i)perylene	191-24-2	6.3	J 3.7	9.2		5
10138	Benzo(k)fluoranthene	207-08-9	3.7	U 3.7	9.2		5
10138	Chrysene	218-01-9	15	1.8	9.2		5
10138	Dibenz(a,h)anthracene	53-70-3	3.7	U 3.7	9.2		5
10138	Fluoranthene	206-44-0	30	3.7	9.2		5
10138	Fluorene	86-73-7	3.7	U 3.7	9.2		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	4.5	J 3.7	9.2		5
10138	1-Methylnaphthalene	90-12-0	3.7	U 3.7	9.2		5
10138	2-Methylnaphthalene	91-57-6	3.7	U 3.7	9.2		5
10138	Naphthalene	91-20-3	3.7	U 3.7	9.2		5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.2		5
10138	Phenanthrene	85-01-8	18	3.7	9.2		5
10138	Pyrene	129-00-0	19	3.7	9.2		5

Reporting limits were raised due to interference from the sample matrix.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U 1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U 4.9	10	1
10401	2,4-DB	94-82-6	0.70	U 0.70	1.9	1
10401	Dicamba	1918-00-9	0.45	U 0.45	1.3	1
10401	Dinoseb	88-85-7	0.90	U 0.90	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U 0.90	1.9	1
10401	MCPA	94-74-6	85	U 85	280	1
10401	MCPP (Mecoprop)	93-65-2	84	U 84	280	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	0.092 U	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.12 J	0.084	0.19		1
The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.074 U	0.074	0.19		1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.19		1
01363	Beta BHC	319-85-7	0.067 U	0.067	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.19		1
01363	Chlordane	57-74-9	1.5 U	1.5	3.8		1
01363	p,p-DDD	72-54-8	0.074 U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.10 U	0.10	0.38		1
01363	p,p-DDT	50-29-3	0.95	0.074	0.38		1
01363	Delta BHC	319-86-8	0.040 U	0.040	0.19		1
01363	Dieldrin	60-57-1	0.15 U	0.15	0.38		1
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.19		1
01363	Endosulfan II	33213-65-9	0.089 U	0.089	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074 U	0.074	0.38		1
01363	Endrin	72-20-8	0.074 U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074 U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.074 U	0.074	0.38		1
01363	Heptachlor	76-44-8	0.067 U	0.067	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.038 U	0.038	0.19		1
01363	Methoxychlor	72-43-5	0.38 U	0.38	1.9		1
01363	Mirex	2385-85-5	0.12 U	0.12	0.38		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.4		1
The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar results are observed for both. The original data is reported.							
The surrogate recovery for the reextract is low.							
Reporting limits were raised due to interference from the sample matrix.							
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.37 U	0.37	1.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.37 U	0.37	1.9		1
10225	PCB-1242	53469-21-9	0.37 U	0.37	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.44 U	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	24,200	5.60	22.2		1
07914	Boron	7440-42-8	0.990 U	0.990	5.56		1
01650	Calcium	7440-70-2	9,360	6.82	22.2		1
01654	Iron	7439-89-6	29,800	5.24	22.2		1
01656	Lithium	7439-93-2	19.4	0.24	2.2		1
01657	Magnesium	7439-95-4	5,310	2.83	11.1		1
06958	Manganese	7439-96-5	538	0.0868	0.556		1
10145	Phosphorus	7723-14-0	445	0.623	11.1		1
01662	Potassium	7440-09-7	4,050	20.0	55.6		1
01667	Sodium	7440-23-5	129	41.5	111		1
07968	Strontium	7440-24-6	37.8	0.0690	0.556		1
06969	Tin	7440-31-5	2.88 J	1.11	11.1		1
06970	Titanium	7440-32-6	1,450	0.423	1.11		1
10146	Zirconium	7440-67-7	5.62	0.934	5.56		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.351	0.0655	0.218		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.65	0.0873	0.436		2
06126	Barium	7440-39-3	187	0.118	0.436		2
06127	Beryllium	7440-41-7	0.913	0.0175	0.109		2
06128	Cadmium	7440-43-9	0.461	0.0436	0.109		2
06131	Chromium	7440-47-3	26.4	0.131	0.436		2
06132	Cobalt	7440-48-4	10.6	0.0218	0.109		2
06133	Copper	7440-50-8	20.4	0.0720	0.436		2
06135	Lead	7439-92-1	16.9	0.0113	0.218		2
06138	Molybdenum	7439-98-7	0.907	0.0545	0.109		2
06139	Nickel	7440-02-0	24.7	0.109	0.436		2
06141	Selenium	7782-49-2	0.155 J	0.0436	0.436		2
06142	Silver	7440-22-4	0.0515 J	0.0131	0.109		2
06145	Thallium	7440-28-0	0.425	0.0327	0.109		2
06148	Vanadium	7440-62-2	82.1	0.0240	0.109		2
06149	Zinc	7440-66-6	108	0.611	3.27		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0043 J	0.0032	0.112		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 300.0							
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.7	0.90	1.1	mg/kg	1
EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.7	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.43 J	0.22	1.1	mg/kg	1
SW-846 9045C modified							
00394	18a pH by 9045C	n.a.	7.78	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	Moisture Content by 160.3	n.a.	11.0	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 18:17	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 18:30	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 14:22	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 12:07	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:09	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL053 SDG#: DE159-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:58	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:58	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:05	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:00	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:34	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:33	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SL053 SDG#: DE159-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	19.2 U	19.2	38.4		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	380		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	580		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.8	U 3.8	9.5	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.5	5
10138	Anthracene	120-12-7	1.9	U 1.9	9.5	5
10138	Benzo(a)anthracene	56-55-3	3.8	U 3.8	9.5	5
10138	Benzo(a)pyrene	50-32-8	5.7	J 3.8	9.5	5
10138	Benzo(b)fluoranthene	205-99-2	5.1	J 3.8	9.5	5
10138	Benzo(g,h,i)perylene	191-24-2	4.1	J 3.8	9.5	5
10138	Benzo(k)fluoranthene	207-08-9	11	3.8	9.5	5
10138	Chrysene	218-01-9	6.9	J 1.9	9.5	5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U 3.8	9.5	5
10138	Fluoranthene	206-44-0	16	3.8	9.5	5
10138	Fluorene	86-73-7	3.8	U 3.8	9.5	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U 3.8	9.5	5
10138	1-Methylnaphthalene	90-12-0	3.8	U 3.8	9.5	5
10138	2-Methylnaphthalene	91-57-6	3.8	U 3.8	9.5	5
10138	Naphthalene	91-20-3	3.8	U 3.8	9.5	5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U 3.8	9.5	5
10138	Phenanthrene	85-01-8	11	3.8	9.5	5
10138	Pyrene	129-00-0	11	3.8	9.5	5

Reporting limits were raised due to interference from the sample matrix.

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U 68	140
					1000000 0
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U 45	140
					1000000 0

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 3 of 9

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90 U	90	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90 U	90	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	140	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	140	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	140	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	140	1000000 0	1
10132	Nitroglycerin	55-63-0	900 U	900	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	90 U	90	140	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	140	1000000 0	1
10132	4-Nitrotoluene	99-99-0	90 U	90	140	1000000 0	1
10132	PETN	78-11-5	900 U	900	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	140	1000000 0	1
10132	Tetryl	479-45-8	69 U	69	140	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	140	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	140	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.1		1
10401	Dalapon	75-99-0	5.1 U	5.1	10		1
10401	2,4-DB	94-82-6	0.71 U	0.71	2.0		1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92 U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92 U	0.92	2.0		1
10401	MCPA	94-74-6	99 U	99	290		1
10401	MCPP (Mecoprop)	93-65-2	86 U	86	290		1
10401	2,4,5-T	93-76-5	0.094 U	0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.16 J	0.086	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable. Despite florisisl cleanup, our usual reporting limits were not attained.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

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Suite 210
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Submitted: 05/24/2011 09:40

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DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	690 U	690	1,700		1
Perchlorate		SW-846 6850 1/2007	ug/kg	ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4 U	2.4	5.8		1
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	2.6 U	2.6	3.9		1
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.13 U	0.13	0.39		1
01363	p,p-DDT	50-29-3	0.65 U	0.076	0.39		1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.097 U	0.097	0.39		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39		1
01363	Endrin	72-20-8	0.076 U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.076 U	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.13 U	0.13	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar results are observed for both. The original data is reported.

The surrogate recovery for the reextract is low.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	1.9 J	1.1	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9	1
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9	1

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SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
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Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	2.3	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Extractable TPH		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	5.6 J	4.6	14		10
10199	EFH (C15-C20)	n.a.	30	4.6	14		10
10199	EFH (C21-C30)	n.a.	81	4.6	14		10
10199	EFH (C30 - C40)	n.a.	250	4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6 U	4.6	14		10
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120 U	120	580		1
10501	Isopropanol	67-63-0	120 U	120	580		1
10501	Methanol	67-56-1	120 U	120	580		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.8 U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8 U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8 U	5.8	12		1
Terphenyls		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	29,900	5.79	23.0		1
07914	Boron	7440-42-8	2.14 J	1.02	5.75		1
01650	Calcium	7440-70-2	9,310	7.05	23.0		1
01654	Iron	7439-89-6	31,500	10.8	46.0		2
01656	Lithium	7439-93-2	26.0	0.25	2.3		1
01657	Magnesium	7439-95-4	6,720	2.92	11.5		1
06958	Manganese	7439-96-5	427	0.0898	0.575		1
10145	Phosphorus	7723-14-0	333	0.644	11.5		1
01662	Potassium	7440-09-7	4,320	20.7	57.5		1
01667	Sodium	7440-23-5	139	42.9	115		1
07968	Strontium	7440-24-6	38.0	0.0713	0.575		1
06969	Tin	7440-31-5	3.12 J	1.15	11.5		1
06970	Titanium	7440-32-6	1,590	0.437	1.15		1
10146	Zirconium	7440-67-7	6.81	0.967	5.75		1

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SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.457	0.0684	0.228		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.68	0.0911	0.456		2
06126	Barium	7440-39-3	145	0.308	1.14		5
06127	Beryllium	7440-41-7	1.07	0.0182	0.114		2
06128	Cadmium	7440-43-9	0.573	0.0456	0.114		2
06131	Chromium	7440-47-3	29.7	0.137	0.456		2
06132	Cobalt	7440-48-4	9.39	0.0228	0.114		2
06133	Copper	7440-50-8	25.7	0.0752	0.456		2
06135	Lead	7439-92-1	22.5	0.0118	0.228		2
06138	Molybdenum	7439-98-7	1.32	0.0570	0.114		2
06139	Nickel	7440-02-0	30.8	0.114	0.456		2
06141	Selenium	7782-49-2	0.210 J	0.0456	0.456		2
06142	Silver	7440-22-4	0.0939 J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.494	0.0342	0.114		2
06148	Vanadium	7440-62-2	102	0.0251	0.114		2
06149	Zinc	7440-66-6	195	1.60	8.55		5
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0303 J	0.0031	0.109		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.7	0.92	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2 J	0.92	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.5		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.0 J	0.23	1.2		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.56		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.05	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	13.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

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Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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DUP05 SDG#: DE159-17FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:48	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 18:44	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/09/2011 15:14	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 06:40	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 21:14	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 14:50	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:17	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 12:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:28	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 20:38	Heather E Williams	10
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 23:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:57	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 22:22	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1

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SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
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Account # 13013

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DUP05 SDG#: DE159-17FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:52	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:19	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:35	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:35	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:41	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:41	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:19	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:54	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:14	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	06/01/2011 00:14	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:56	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 18:50	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:44	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 9 of 9

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

DUP05 SDG#: DE159-17FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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Analysis Report

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Page 1 of 7

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	2.07	0.493	0.985		1
GC/MS	Semivolatiles SW-846 8270C		ug/l	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1 U	1	5		1
04678	Benzidine	92-87-5	20 U	20	59		1
04678	Benzoic acid	65-85-0	6 U	6	15		1
04678	Benzyl alcohol	100-51-6	5 U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1 U	1	5		1
04678	Carbazole	86-74-8	1 U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1 U	1	5		1
04678	4-Chloroaniline	106-47-8	1 U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1 U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1 U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1 U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2 U	2	5		1
04678	2-Chlorophenol	95-57-8	1 U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2 U	2	5		1
04678	Dibenzofuran	132-64-9	1 U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2 U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1 U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3 U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3 U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5 U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10 U	10	29		1
04678	2,4-Dinitrotoluene	121-14-2	1 U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1 U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1 U	1	5		1
04678	Hexachlorobenzene	118-74-1	1 U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1 U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5 U	5	15		1
04678	Hexachloroethane	67-72-1	1 U	1	5		1
04678	Isophorone	78-59-1	1 U	1	5		1
04678	2-Methylphenol	95-48-7	1 U	1	5		1
04678	4-Methylphenol	106-44-5	2 U	2	5		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1 U	1	5		1
04678	3-Nitroaniline	99-09-2	1 U	1	5		1
04678	4-Nitroaniline	100-01-6	1 U	1	5		1
04678	Nitrobenzene	98-95-3	1 U	1	5		1
04678	2-Nitrophenol	88-75-5	1 U	1	5		1
04678	4-Nitrophenol	100-02-7	10 U	10	29		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles SW-846 8270C		ug/l	ug/l	ug/l	ug/l	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3 U	3	15		1
04678	Phenol	108-95-2	1 U	1	5		1
04678	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1 U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1 U	1	5		1
GC/MS	Semivolatiles SW-846 8270C SIM		ug/l	ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.0098 U	0.0098	0.049		1
10137	Acenaphthylene	208-96-8	0.0098 U	0.0098	0.049		1
10137	Anthracene	120-12-7	0.0098 U	0.0098	0.049		1
10137	Benzo(a)anthracene	56-55-3	0.0098 U	0.0098	0.049		1
10137	Benzo(a)pyrene	50-32-8	0.0098 U	0.0098	0.049		1
10137	Benzo(b)fluoranthene	205-99-2	0.0098 U	0.0098	0.049		1
10137	Benzo(g,h,i)perylene	191-24-2	0.0098 U	0.0098	0.049		1
10137	Benzo(k)fluoranthene	207-08-9	0.0098 U	0.0098	0.049		1
10137	Butylbenzylphthalate	85-68-7	0.073 J	0.049	0.98		1
10137	Di-n-butylphthalate	84-74-2	0.13 J	0.049	0.98		1
10137	Chrysene	218-01-9	0.0098 U	0.0098	0.049		1
10137	Dibenz(a,h)anthracene	53-70-3	0.0098 U	0.0098	0.049		1
10137	Diethylphthalate	84-66-2	0.049 U	0.049	0.98		1
10137	Dimethylphthalate	131-11-3	0.049 U	0.049	0.98		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.21 J	0.049	0.98		1
10137	Fluoranthene	206-44-0	0.0098 U	0.0098	0.049		1
10137	Fluorene	86-73-7	0.0098 U	0.0098	0.049		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.0098 U	0.0098	0.049		1
10137	1-Methylnaphthalene	90-12-0	0.034 J	0.0098	0.049		1
10137	2-Methylnaphthalene	91-57-6	0.034 J	0.0098	0.049		1
10137	Naphthalene	91-20-3	0.23	0.029	0.049		1
10137	N-Nitrosodimethylamine	62-75-9	0.0098 U	0.0098	0.049		1
10137	Di-n-octylphthalate	117-84-0	0.049 U	0.049	0.98		1
10137	Phenanthrene	85-01-8	0.0098 U	0.0098	0.049		1
10137	Pyrene	129-00-0	0.0098 U	0.0098	0.049		1
Explosives	SW-846 8330A		ug/l	ug/l	ug/l	ug/l	
10131	4-Amino-2,6-Dinitrotoluene	19406-51-0	0.30 U	0.30	0.60	1000000 0	1
10131	2-Amino-4,6-Dinitrotoluene	35572-78-2	0.20 U	0.20	0.60	1000000 0	1
10131	2,6-Diamino-4-nitrotoluene	59229-75-3	0.20 U	0.20	0.60	1000000 0	1
10131	2,4-Diamino-6-nitrotoluene	6629-29-4	0.20 U	0.20	0.60	1000000 0	1
10131	1,3-Dinitrobenzene	99-65-0	0.20 U	0.20	0.60	1000000 0	1
10131	2,4-Dinitrotoluene	121-14-2	0.20 U	0.20	0.60	1000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/l		ug/l	ug/l	ug/l	
10131	2,6-Dinitrotoluene	606-20-2	0.20	U	0.20	0.60	1000000 0	1
10131	HMX	2691-41-0	0.65	U	0.65	2.0	1000000 0	1
10131	Nitrobenzene	98-95-3	0.20	U	0.20	0.60	1000000 0	1
10131	Nitroglycerin	55-63-0	5.2	U	5.2	15	1000000 0	1
10131	2-Nitrotoluene	88-72-2	0.20	U	0.20	0.60	1000000 0	1
10131	3-Nitrotoluene	99-08-1	0.40	U	0.40	1.2	1000000 0	1
10131	4-Nitrotoluene	99-99-0	0.60	U	0.60	1.2	1000000 0	1
10131	PETN	78-11-5	6.0	U	6.0	18	1000000 0	1
10131	RDX	121-82-4	0.20	U	0.20	0.60	1000000 0	1
10131	Tetryl	479-45-8	0.40	U	0.40	0.60	1000000 0	1
10131	1,3,5-Trinitrobenzene	99-35-4	0.20	U	0.20	0.60	1000000 0	1
10131	2,4,6-Trinitrotoluene	118-96-7	0.20	U	0.20	0.60	1000000 0	1
Herbicides		SW-846 8151A	ug/l		ug/l	ug/l	ug/l	
10407	2,4-D	94-75-7	0.16	U	0.16	0.49		1
10407	Dalapon	75-99-0	0.25	U	0.25	1.2		1
10407	2,4-DB	94-82-6	0.30	U	0.30	0.98		1
10407	Dicamba	1918-00-9	0.079	U	0.079	0.30		1
10407	Dinoseb	88-85-7	0.098	U	0.098	0.49		1
10407	2,4-DP (Dichlorprop)	120-36-5	0.16	U	0.16	0.49		1
10407	MCPA	94-74-6	300	U	300	980		1
10407	MCPP	93-65-2	49	U	49	200		1
10407	2,4,5-T	93-76-5	0.015	U	0.015	0.049		1
10407	2,4,5-TP	93-72-1	0.0098	U	0.0098	0.049		1
HPLC Organics		SW-846 8315A	ug/l		ug/l	ug/l	ug/l	
04144	25b Formaldehyde	50-00-0	10	U	10	50		1
The LCS/LCSD recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.								
Pesticides/PCBs		SW-846 8081A	ug/l		ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0020	U	0.0020	0.0098		1
00177	Alpha BHC	319-84-6	0.0029	U	0.0029	0.0098		1
00177	Beta BHC	319-85-7	0.0028	U	0.0028	0.0098		1
00177	Gamma BHC - Lindane	58-89-9	0.0020	U	0.0020	0.0098		1

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Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/l	ug/l	ug/l	ug/l	
00177	Chlordane	57-74-9	0.12 U	0.12	0.49		1
00177	p,p-DDD	72-54-8	0.0049 U	0.0049	0.020		1
00177	p,p-DDE	72-55-9	0.0049 U	0.0049	0.020		1
00177	p,p-DDT	50-29-3	0.0049 U	0.0049	0.020		1
00177	Delta BHC	319-86-8	0.0028 U	0.0028	0.0098		1
00177	Dieldrin	60-57-1	0.0052 U	0.0052	0.020		1
00177	Endosulfan I	959-98-8	0.0042 U	0.0042	0.0098		1
00177	Endosulfan II	33213-65-9	0.015 U	0.015	0.020		1
00177	Endosulfan Sulfate	1031-07-8	0.0057 U	0.0057	0.020		1
00177	Endrin	72-20-8	0.0079 U	0.0079	0.020		1
00177	Endrin Aldehyde	7421-93-4	0.020 U	0.020	0.098		1
00177	Endrin Ketone	53494-70-5	0.0049 U	0.0049	0.020		1
00177	Heptachlor	76-44-8	0.0025 U	0.0025	0.0098		1
00177	Heptachlor Epoxide	1024-57-3	0.0022 U	0.0022	0.0098		1
00177	Methoxychlor	72-43-5	0.029 U	0.029	0.098		1
00177	Mirex	2385-85-5	0.083 U	0.083	0.24		1
00177	Toxaphene	8001-35-2	0.98 U	0.98	2.9		1
Pesticides/PCBs		SW-846 8082	ug/l	ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.098 U	0.098	0.49		1
10227	Aroclor 5442	12642-23-8	0.098 U	0.098	0.49		1
10227	Aroclor 5460	11126-42-4	0.098 U	0.098	0.49		1
10227	PCB-1016	12674-11-2	0.098 U	0.098	0.49		1
10227	PCB-1221	11104-28-2	0.098 U	0.098	0.49		1
10227	PCB-1232	11141-16-5	0.20 U	0.20	0.49		1
10227	PCB-1242	53469-21-9	0.098 U	0.098	0.49		1
10227	PCB-1248	12672-29-6	0.098 U	0.098	0.49		1
10227	PCB-1254	11097-69-1	0.098 U	0.098	0.49		1
10227	PCB-1260	11096-82-5	0.15 U	0.15	0.49		1
10227	PCB-1262	37324-23-5	0.20 U	0.20	0.49		1
10227	PCB-1268	11100-14-4	0.16 U	0.16	0.49		1
GC Extractable TPH		SW-846 8015B modified	mg/l	mg/l	mg/l	mg/l	
10365	EFH (C12-C14)	n.a.	0.097 U	0.097	0.58		1
10365	EFH (C15-C20)	n.a.	0.097 U	0.097	0.58		1
10365	EFH (C21-C30)	n.a.	0.097 U	0.097	0.58		1
10365	EFH (C30 - C40)	n.a.	0.097 U	0.097	0.58		1
10365	EFH (C8-C11)	n.a.	0.097 U	0.097	0.58		1
Terphenyls		SW-846 8015B	mg/l	mg/l	mg/l	mg/l	
10319	m-Terphenyl	92-06-8	0.078 U	0.078	0.24		1
10319	o-Terphenyl	84-15-1	0.078 U	0.078	0.24		1
10319	p-Terphenyl	92-94-4	0.078 U	0.078	0.24		1
The surrogate data is outside the QC limits. Due to insufficient sample volume, a repeat analysis could not be performed to confirm the results.							
Metals		SW-846 6010B	mg/l	mg/l	mg/l	mg/l	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
		SW-846 6020	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00053 U	0.00053	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
		SW-846 7470A	mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000046 U	0.000046	0.00020		1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
		EPA 314.0	ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
		SW-846 7199	ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1
		SW-846 9012B	mg/l	mg/l	mg/l	mg/l	
08255	17b Cyanide by 9012B	57-12-5	0.0050 U	0.0050	0.010		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry			Std. Units	Std. Units	Std. Units	Std. Units	
00200	18b pH by 9040B	n.a.	5.4	0.010	0.010		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	15b NDMA by 1625C	EPA 1625C	1	11144WAA026	05/25/2011 19:09	Gregory J Drahovsky	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	11146WAD026	06/06/2011 00:06	Linda M Hartenstine	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11144WAK026	05/26/2011 13:29	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	11146WAD026	05/26/2011 16:00	Timothy J Attenberger	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	11144WAK026	05/25/2011 09:50	Catherine R Wiker	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11144WAA026	05/24/2011 13:25	Wanda F Oswald	1
10131	16b Energetics by 8330A	SW-846 8330A	1	111580002A	06/09/2011 00:05	Michele D Hamilton	1
04144	25b Formaldehyde 8315A	SW-846 8315A	1	111440027A	05/27/2011 00:09	Michele D Hamilton	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	111450014A	05/27/2011 00:36	Michele D Hamilton	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	111460040A	06/03/2011 06:26	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	111460041A	05/28/2011 14:10	Richard A Shober	1
11117	PCB Waters Extraction	SW-846 3510C	1	111460041A	05/27/2011 14:00	Kelli M Barto	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	111460040A	05/27/2011 14:00	Kelli M Barto	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	111450014A	05/25/2011 20:00	Elaine F Stoltzfus	1
01013	Formaldehyde Extraction	SW-846 8315A	1	111440027A	05/25/2011 08:30	Denise L Trimby	1
11122	Energetics Extraction	SW-846 8330	2	111580002A	06/07/2011 18:00	Kelli M Barto	1
10365	9b TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111450031A	06/03/2011 01:53	Heather E Williams	1
10319	20b Terphenyls by 8015B	SW-846 8015B	1	111450009A	05/26/2011 19:06	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	111450031A	05/26/2011 08:00	Catherine R Wiker	1
10304	Terphenyls water prep	SW-846 3510C	1	111450009A	05/25/2011 17:30	Kathryn I DeHaven	1
01743	Aluminum	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
08014	Boron	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

EB-05 SDG#: DE159-18EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01756	Lithium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07058	Manganese	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
10143	Phosphorus	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01762	Potassium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01767	Sodium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
08068	Strontium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07069	Tin	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07070	Titanium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
10144	Zirconium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
06024	Antimony	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06026	Barium	SW-846 6020	1	111446050005D	05/27/2011 17:11	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06033	Copper	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06035	Lead	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	111446050005C	05/27/2011 17:11	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	111446050005B	05/27/2011 17:11	Choon Y Tian	1
06042	Silver	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06045	Thallium	SW-846 6020	2	111536050004A	06/03/2011 06:49	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
00259	Mercury	SW-846 7470A	2	111465713002	05/31/2011 15:11	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	111441848008	05/25/2011 10:52	James L Mertz	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	111446050005	05/25/2011 11:46	James L Mertz	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	2	111536050004	06/02/2011 23:00	Mirit S Shenouda	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	111465713002	05/26/2011 15:20	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	11144196901B	05/25/2011 05:58	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	11154621701A	06/03/2011 15:31	William L Hamaker Jr	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	11143495401B	05/24/2011 11:58	Parker D Lindstrom	1
08255	17b Cyanide by 9012B	SW-846 9012B	1	11146117101B	05/26/2011 19:00	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012B	1	11146117101B	05/26/2011 09:40	Nancy J Shoop	1
00200	18b pH by 9040B	SW-846 9040B	1	11144020001A	05/24/2011 19:50	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	380		1
04688	Fluoranthene	206-44-0	37	J 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	580		1
04688	Phenanthrene	85-01-8	25	J 19	190		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	Pyrene	129-00-0	34	J 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.8	U 3.8	9.5	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.5	5
10138	Anthracene	120-12-7	1.9	U 1.9	9.5	5
10138	Benzo(a)anthracene	56-55-3	8.2	J 3.8	9.5	5
10138	Benzo(a)pyrene	50-32-8	12	3.8	9.5	5
10138	Benzo(b)fluoranthene	205-99-2	23	3.8	9.5	5
10138	Benzo(g,h,i)perylene	191-24-2	7.3	J 3.8	9.5	5
10138	Benzo(k)fluoranthene	207-08-9	6.6	J 3.8	9.5	5
10138	Chrysene	218-01-9	14	1.9	9.5	5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U 3.8	9.5	5
10138	Fluorene	86-73-7	3.8	U 3.8	9.5	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	6.0	J 3.8	9.5	5
10138	1-Methylnaphthalene	90-12-0	3.8	U 3.8	9.5	5
10138	2-Methylnaphthalene	91-57-6	3.8	U 3.8	9.5	5
10138	Naphthalene	91-20-3	3.8	U 3.8	9.5	5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U 3.8	9.5	5

Reporting limits were raised due to interference from the sample matrix.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	14	U 14	41
10401	Dalapon	75-99-0	51	U 51	100
10401	2,4-DB	94-82-6	7.1	U 7.1	20
10401	Dicamba	1918-00-9	4.6	U 4.6	14
10401	Dinoseb	88-85-7	9.2	U 9.2	28
10401	2,4-DP (Dichlorprop)	120-36-5	9.2	U 9.2	20
10401	MCPA	94-74-6	880	U 880	2,900
10401	MCPP (Mecoprop)	93-65-2	11,000	U 11,000	11,000

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	1.0 U	1.0	2.0		10
10401	2,4,5-TP	93-72-1	1.4 J	0.86	2.0		10

Reporting limits were raised due to interference from the sample matrix.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCP and 2,4,5-T

Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.39 U	0.39	1.9		10
01363	Beta BHC	319-85-7	0.69 U	0.69	1.9		10
01363	Gamma BHC - Lindane	58-89-9	2.3 U	2.3	2.3		10
01363	Chlordane	57-74-9	5.1 U	5.1	5.1		1
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.42 U	0.42	0.42		1
01363	p,p-DDT	50-29-3	0.37 J	0.076	0.39		1
01363	Delta BHC	319-86-8	0.42 U	0.42	1.9		10
01363	Dieldrin	60-57-1	0.20 U	0.20	0.39		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39		1
01363	Endrin	72-20-8	0.076 U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.076 U	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.12 U	0.12	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar sample results are observed for both.

Reporting limits were raised due to interference from the sample matrix.

The surrogate recovery for the reextract is low.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5460	11126-42-4	2.7 J	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0		1
10225	PCB-1248	12672-29-6	4.8	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	2.3	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	7,420	5.82	23.1		1
07914	Boron	7440-42-8	1.03 U	1.03	5.79		1
01650	Calcium	7440-70-2	8,220	7.09	23.1		1
01654	Iron	7439-89-6	10,300	5.45	23.1		1
01656	Lithium	7439-93-2	11.1	0.25	2.3		1
01657	Magnesium	7439-95-4	2,250	2.94	11.6		1
06958	Manganese	7439-96-5	162	0.0903	0.579		1
10145	Phosphorus	7723-14-0	356	0.648	11.6		1
01662	Potassium	7440-09-7	1,580	20.8	57.9		1
01667	Sodium	7440-23-5	113 J	43.2	116		1
07968	Strontium	7440-24-6	26.4	0.0718	0.579		1
06969	Tin	7440-31-5	2.36 J	1.16	11.6		1
06970	Titanium	7440-32-6	637	0.440	1.16		1
10146	Zirconium	7440-67-7	1.91 J	0.972	5.79		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.306	0.0681	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.05	0.0908	0.454		2
06126	Barium	7440-39-3	77.2	0.123	0.454		2
06127	Beryllium	7440-41-7	0.336	0.0182	0.113		2
06128	Cadmium	7440-43-9	0.512	0.0454	0.113		2
06131	Chromium	7440-47-3	10.8	0.136	0.454		2
06132	Cobalt	7440-48-4	2.74	0.0227	0.113		2
06133	Copper	7440-50-8	9.14	0.0749	0.454		2
06135	Lead	7439-92-1	14.7	0.0118	0.227		2
06138	Molybdenum	7439-98-7	1.11	0.0567	0.113		2
06139	Nickel	7440-02-0	9.45	0.113	0.454		2
06141	Selenium	7782-49-2	0.154 J	0.0454	0.454		2
06142	Silver	7440-22-4	0.220	0.0136	0.113		2
06145	Thallium	7440-28-0	0.185	0.0340	0.113		2
06148	Vanadium	7440-62-2	24.0	0.0250	0.113		2
06149	Zinc	7440-66-6	146	0.635	3.40		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
00159	Mercury	SW-846 7471A 7439-97-6	mg/kg 0.0131 J	mg/kg 0.0033	mg/kg 0.114	mg/kg	1
Wet Chemistry							
07332	11a Anions by 300.0 - Fluoride	EPA 300.0 16984-48-8	mg/kg 2.0	mg/kg 0.93	mg/kg 1.2	mg/kg	1
10147	7a Perchlorate EPA 314.0	EPA 314.0 14797-73-0	ug/kg 10.4 U	ug/kg 10.4	ug/kg 34.7	ug/kg	1
05892	3a Cr VI by EPA 7199	SW-846 7199 18540-29-9	mg/kg 0.23 U	mg/kg 0.23	mg/kg 1.2	mg/kg	1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	7.19	0.0100	0.0100		1
Wet Chemistry							
11624	Moisture Content by 160.3	EPA 160.3 modified n.a.	% 13.6	% 0.50	% 0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 19:10	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/09/2011 15:44	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/31/2011 13:33	Michele D Hamilton	10
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 13:02	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 13:15	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:46	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SED35 SDG#: DE159-19*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 01:04	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 01:04	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:06	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 23:18	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:56	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/20/2011 09:34

SED35 SDG#: DE159-19*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B111471AA Sample number(s): 6296035-6296037, 6296039									
Acetone	9.6	6.7	8.0	ug/kg	159	153	32-209	4	30
Benzene	0.10	U	0.10	ug/kg	106	103	80-120	2	30
Bromobenzene	0.13	U	0.13	ug/kg	99	98	79-120	1	30
Bromochloromethane	0.33	U	0.33	ug/kg	106	101	79-124	5	30
Bromodichloromethane	0.08	U	0.08	ug/kg	100	96	78-120	4	30
Bromoform	0.40	U	0.40	ug/kg	94	93	70-120	1	30
Bromomethane	0.25	U	0.25	ug/kg	73	73	32-162	1	30
2-Butanone	1.2	U	1.2	ug/kg	134	124	46-153	8	30
n-Butylbenzene	0.12	U	0.12	ug/kg	102	102	72-120	0	30
sec-Butylbenzene	0.06	U	0.06	ug/kg	103	103	75-120	1	30
tert-Butylbenzene	0.16	U	0.16	ug/kg	102	100	75-120	2	30
Carbon Tetrachloride	0.14	U	0.14	ug/kg	105	99	69-122	6	30
Chlorobenzene	0.11	U	0.11	ug/kg	103	100	80-120	2	30
Chloroethane	0.13	U	0.13	ug/kg	67	67	37-154	0	30
2-Chloroethyl Vinyl Ether	0.30	U	0.30	ug/kg	95	91	43-146	5	30
Chloroform	0.12	U	0.12	ug/kg	107	101	80-120	6	30
Chloromethane	0.33	U	0.33	ug/kg	81	80	54-132	0	30
2-Chlorotoluene	0.14	U	0.14	ug/kg	99	99	78-120	0	30
4-Chlorotoluene	0.14	U	0.14	ug/kg	103	102	79-120	1	30
Chlorotrifluoroethene	0.50	U	0.50	ug/kg	98	101	22-131	3	30
1,2-Dibromo-3-chloropropane	0.70	U	0.70	ug/kg	101	96	58-120	5	30
Dibromochloromethane	0.20	U	0.20	ug/kg	97	95	77-120	2	30
1,2-Dibromoethane	0.17	U	0.17	ug/kg	103	99	80-120	5	30
Dibromomethane	0.24	U	0.24	ug/kg	100	96	80-120	3	30
1,2-Dichlorobenzene	0.09	U	0.09	ug/kg	101	100	79-120	1	30
1,3-Dichlorobenzene	0.12	U	0.12	ug/kg	97	97	78-120	0	30
1,4-Dichlorobenzene	0.16	U	0.16	ug/kg	99	98	79-120	1	30
Dichlorodifluoromethane	0.12	U	0.12	ug/kg	71	67	20-120	6	30
1,1-Dichloroethane	0.10	U	0.10	ug/kg	106	102	80-120	4	30
1,2-Dichloroethane	0.15	U	0.15	ug/kg	106	103	71-129	2	30
1,1-Dichloroethene	0.39	U	0.39	ug/kg	108	103	73-123	5	30
cis-1,2-Dichloroethene	0.19	U	0.19	ug/kg	103	99	80-120	5	30
trans-1,2-Dichloroethene	0.12	U	0.12	ug/kg	104	100	79-120	4	30
1,2-Dichloropropane	0.17	U	0.17	ug/kg	102	99	80-120	2	30
1,3-Dichloropropane	0.08	U	0.08	ug/kg	104	101	80-120	3	30
2,2-Dichloropropane	0.17	U	0.17	ug/kg	100	96	72-123	4	30
1,1-Dichloropropene	0.13	U	0.13	ug/kg	106	102	77-120	4	30
cis-1,3-Dichloropropene	0.16	U	0.16	ug/kg	98	96	80-120	2	30
trans-1,3-Dichloropropene	0.17	U	0.17	ug/kg	95	93	77-120	2	30
Ethylbenzene	0.06	U	0.06	ug/kg	104	103	80-120	1	30
Freon 113	0.11	U	0.11	ug/kg	106	99	61-126	7	30
Freon 133a	0.50	U	0.50	ug/kg	77*	77*	78-120	0	30
Hexachlorobutadiene	0.14	U	0.14	ug/kg	89	90	57-120	0	30
2-Hexanone	1.6	U	1.6	ug/kg	123	118	45-155	4	30
Isopropylbenzene	0.06	U	0.06	ug/kg	106	105	76-120	1	30
p-Isopropyltoluene	0.11	U	0.11	ug/kg	101	102	75-120	1	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21 U	0.21	4.0	ug/kg	103	99	74-121	4	30
4-Methyl-2-pentanone	0.39 U	0.39	8.0	ug/kg	107	101	61-134	5	30
Methylene Chloride	1.1 J	0.24	4.0	ug/kg	110	103	76-124	6	30
n-Propylbenzene	0.07 U	0.07	4.0	ug/kg	108	107	77-120	1	30
Styrene	0.10 U	0.10	4.0	ug/kg	104	102	76-120	2	30
1,1,1,2-Tetrachloroethane	0.11 U	0.11	4.0	ug/kg	101	99	80-120	2	30
1,1,2,2-Tetrachloroethane	0.23 U	0.23	4.0	ug/kg	98	94	71-123	4	30
Tetrachloroethene	0.20 U	0.20	4.0	ug/kg	103	99	77-120	3	30
Toluene	0.08 U	0.08	4.0	ug/kg	103	102	80-120	1	30
1,2,3-Trichlorobenzene	0.14 U	0.14	4.0	ug/kg	92	94	64-120	2	30
1,2,4-Trichlorobenzene	0.18 U	0.18	4.0	ug/kg	87	90	68-120	3	30
1,1,1-Trichloroethane	0.20 U	0.20	4.0	ug/kg	102	99	71-125	3	30
1,1,2-Trichloroethane	0.27 U	0.27	4.0	ug/kg	101	98	80-120	3	30
Trichloroethene	0.15 U	0.15	4.0	ug/kg	101	99	80-120	3	30
Trichlorofluoromethane	0.29 U	0.29	4.0	ug/kg	89	83	58-133	7	30
1,2,3-Trichloropropane	0.33 U	0.33	4.0	ug/kg	97	95	71-123	3	30
1,2,4-Trimethylbenzene	0.40 U	0.40	4.0	ug/kg	102	102	79-120	0	30
1,3,5-Trimethylbenzene	0.10 U	0.10	4.0	ug/kg	104	103	78-120	1	30
Vinyl Chloride	0.20 U	0.20	4.0	ug/kg	81	79	53-120	2	30
m+p-Xylene	0.17 U	0.17	4.0	ug/kg	106	105	80-120	2	30
o-Xylene	0.17 U	0.17	4.0	ug/kg	103	103	80-120	1	30
Batch number: E111461AA	Sample number(s): 6296041								
1,4-Dioxane	0.5 U	0.5	2.0	ug/l	97	106	80-123	9	30
Batch number: E111462AA	Sample number(s): 6296035-6296037, 6296039								
1,4-Dioxane	5.0 U	5.0	15	ug/kg	104	104	70-130	0	30
Batch number: L111471AA	Sample number(s): 6296041								
Acetone	6 U	6.	20	ug/l	134	111	49-234	19	30
Benzene	0.5 U	0.5	5	ug/l	97	98	79-120	1	30
Bromobenzene	1 U	1.	5	ug/l	92	93	80-120	1	30
Bromochloromethane	1 U	1.	5	ug/l	95	94	80-120	1	30
Bromodichloromethane	1 U	1.	5	ug/l	90	91	80-120	1	30
Bromoform	1 U	1.	5	ug/l	78	80	61-120	2	30
Bromomethane	1 U	1.	5	ug/l	102	103	44-120	1	30
2-Butanone	3 U	3.	10	ug/l	105	97	66-151	8	30
n-Butylbenzene	1 U	1.	5	ug/l	96	97	74-120	1	30
sec-Butylbenzene	1 U	1.	5	ug/l	91	94	78-120	4	30
tert-Butylbenzene	1 U	1.	5	ug/l	91	93	80-120	2	30
Carbon Tetrachloride	1 U	1.	5	ug/l	89	89	75-123	0	30
Chlorobenzene	0.8 U	0.8	5	ug/l	92	93	80-120	2	30
Chloroethane	1 U	1.	5	ug/l	103	103	49-129	0	30
2-Chloroethyl Vinyl Ether	2 U	2.	10	ug/l	92	93	56-129	1	30
Chloroform	0.8 U	0.8	5	ug/l	96	97	77-122	2	30
Chloromethane	1 U	1.	5	ug/l	99	100	60-129	1	30
2-Chlorotoluene	1 U	1.	5	ug/l	93	94	80-120	1	30
4-Chlorotoluene	1 U	1.	5	ug/l	94	97	80-120	3	30
Chlorotrifluoroethene	2 U	2.	5	ug/l	92	91	38-136	1	30
1,2-Dibromo-3-chloropropane	2 U	2.	5	ug/l	86	87	56-126	1	30
Dibromochloromethane	1 U	1.	5	ug/l	87	87	80-120	0	30
1,2-Dibromoethane	1 U	1.	5	ug/l	94	95	80-120	1	30
Dibromomethane	1 U	1.	5	ug/l	90	90	80-120	1	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	93	94	80-120	1	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	93	94	80-120	1	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	94	95	80-120	1	30
Dichlorodifluoromethane	2 U	2.	5	ug/l	81	83	47-120	3	30
1,1-Dichloroethane	1 U	1.	5	ug/l	95	96	79-120	2	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1 U	1.	5	ug/l	97	96	70-130	2	30
1,1-Dichloroethene	0.8 U	0.8	5	ug/l	90	90	74-123	0	30
cis-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	93	94	80-120	2	30
trans-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	92	95	80-120	3	30
1,2-Dichloropropane	1 U	1.	5	ug/l	95	95	78-120	0	30
1,3-Dichloropropane	1 U	1.	5	ug/l	95	97	80-120	2	30
2,2-Dichloropropane	1 U	1.	5	ug/l	88	89	77-124	1	30
1,1-Dichloropropene	1 U	1.	5	ug/l	91	93	80-120	2	30
cis-1,3-Dichloropropene	1 U	1.	5	ug/l	91	91	80-120	0	30
trans-1,3-Dichloropropene	1 U	1.	5	ug/l	87	91	79-120	5	30
Ethylbenzene	0.8 U	0.8	5	ug/l	94	96	79-120	2	30
Freon 113	2 U	2.	10	ug/l	88	90	69-128	3	30
Freon 133a	2 U	2.	5	ug/l	105	101	77-120	5	30
Hexachlorobutadiene	2 U	2.	5	ug/l	81	84	58-120	4	30
2-Hexanone	3 U	3.	10	ug/l	93	92	65-136	2	30
Isopropylbenzene	1 U	1.	5	ug/l	94	96	77-120	2	30
p-Isopropyltoluene	1 U	1.	5	ug/l	91	91	80-120	1	30
Methyl Tertiary Butyl Ether	0.5 U	0.5	5	ug/l	92	92	76-120	0	30
4-Methyl-2-pentanone	3 U	3.	10	ug/l	90	90	70-121	0	30
Methylene Chloride	2 U	2.	5	ug/l	95	96	80-120	2	30
n-Propylbenzene	1 U	1.	5	ug/l	95	93	80-120	3	30
Styrene	1 U	1.	5	ug/l	91	94	80-120	3	30
1,1,1,2-Tetrachloroethane	1 U	1.	5	ug/l	89	92	80-120	3	30
1,1,2,2-Tetrachloroethane	1 U	1.	5	ug/l	100	99	71-120	1	30
Tetrachloroethene	0.8 U	0.8	5	ug/l	90	91	80-121	1	30
Toluene	0.7 U	0.7	5	ug/l	95	96	79-120	2	30
1,2,3-Trichlorobenzene	1 U	1.	5	ug/l	87	89	65-120	2	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	82	84	67-120	2	30
1,1,1-Trichloroethane	0.8 U	0.8	5	ug/l	95	94	75-127	1	30
1,1,2-Trichloroethane	0.8 U	0.8	5	ug/l	95	95	80-120	0	30
Trichloroethene	1 U	1.	5	ug/l	92	92	80-120	0	30
Trichlorofluoromethane	2 U	2.	5	ug/l	100	101	64-129	2	30
1,2,3-Trichloropropane	1 U	1.	5	ug/l	93	95	80-120	2	30
1,2,4-Trimethylbenzene	1 U	1.	5	ug/l	94	96	74-120	2	30
1,3,5-Trimethylbenzene	1 U	1.	5	ug/l	93	94	75-120	0	30
Vinyl Chloride	1 U	1.	5	ug/l	97	99	65-125	2	30
m+p-Xylene	0.8 U	0.8	5	ug/l	93	95	80-120	2	30
o-Xylene	0.8 U	0.8	5	ug/l	92	93	80-120	1	30

Batch number: 11144WAA026
N-Nitrosodimethylamine

Sample number(s): 6296055
0.500 U 0.500 1.00

ng/l 104 96 70-130 8 30

Batch number: 11144WAK026

Sample number(s): 6296055

Acenaphthene	0.010 U	0.010	0.050	ug/l	96	99	74-109	4	30
Acenaphthylene	0.010 U	0.010	0.050	ug/l	98	103	70-110	6	30
Anthracene	0.010 U	0.010	0.050	ug/l	102	104	66-111	2	30
Benzo(a)anthracene	0.010 U	0.010	0.050	ug/l	103	105	72-114	2	30
Benzo(a)pyrene	0.010 U	0.010	0.050	ug/l	142*	146*	60-127	3	30
Benzo(b)fluoranthene	0.010 U	0.010	0.050	ug/l	145*	148*	69-123	2	30
Benzo(g,h,i)perylene	0.010 U	0.010	0.050	ug/l	147*	152*	57-131	4	30
Benzo(k)fluoranthene	0.010 U	0.010	0.050	ug/l	143*	147*	59-130	3	30
Butylbenzylphthalate	0.070 J	0.050	1.0	ug/l	105	109	40-138	4	30
Di-n-butylphthalate	0.082 J	0.050	1.0	ug/l	102	105	74-131	3	30
Chrysene	0.010 U	0.010	0.050	ug/l	101	103	76-116	2	30
Dibenz(a,h)anthracene	0.010 U	0.010	0.050	ug/l	147*	153*	55-134	4	30
Diethylphthalate	0.050 U	0.050	1.0	ug/l	98	102	57-134	4	30
Dimethylphthalate	0.050 U	0.050	1.0	ug/l	97	103	40-119	6	30
Bis(2-Ethylhexyl)phthalate	0.11 J	0.050	1.0	ug/l	121	124	57-154	2	30

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	0.010 U	0.010	0.050	ug/l	102	104	75-116	2	30
Fluorene	0.010 U	0.010	0.050	ug/l	102	107	75-114	5	30
Indeno(1,2,3-cd)pyrene	0.010 U	0.010	0.050	ug/l	147*	152*	69-124	3	30
1-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	101	96	71-117	5	30
2-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	90	85	75-115	5	30
Naphthalene	0.030 U	0.030	0.050	ug/l	97	96	72-109	1	30
N-Nitrosodimethylamine	0.010 U	0.010	0.050	ug/l	63	69	36-89	9	30
Di-n-octylphthalate	0.050 U	0.050	1.0	ug/l	144	152*	57-145	6	30
Phenanthrene	0.010 U	0.010	0.050	ug/l	97	99	76-111	2	30
Pyrene	0.010 U	0.010	0.050	ug/l	96	98	69-118	2	30

Batch number: 11145SLD026	Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056								
Acenaphthene	17 U	17.	170	ug/kg	81		76-111		
Acenaphthylene	17 U	17.	170	ug/kg	85		75-122		
Aniline	170 U	170.	500	ug/kg	63		34-94		
Anthracene	17 U	17.	170	ug/kg	84		76-112		
Benzidine	1,200 U	1,200.	3,300	ug/kg	38		15-121		
Benzo(a)anthracene	17 U	17.	170	ug/kg	85		73-112		
Benzo(a)pyrene	17 U	17.	170	ug/kg	87		69-122		
Benzo(b)fluoranthene	17 U	17.	170	ug/kg	87		61-127		
Benzo(g,h,i)perylene	17 U	17.	170	ug/kg	82		65-122		
Benzo(k)fluoranthene	17 U	17.	170	ug/kg	83		67-125		
Benzoic acid	170 U	170.	500	ug/kg	104		62-113		
Benzyl alcohol	170 U	170.	500	ug/kg	96		68-111		
4-Bromophenyl-phenylether	17 U	17.	170	ug/kg	75*		79-117		
Butylbenzylphthalate	17 U	17.	170	ug/kg	91		75-115		
Di-n-butylphthalate	17 U	17.	170	ug/kg	84		79-112		
Carbazole	17 U	17.	170	ug/kg	89		77-113		
4-Chloro-3-methylphenol	33 U	33.	170	ug/kg	97		74-119		
4-Chloroaniline	67 U	67.	170	ug/kg	51		10-110		
bis(2-Chloroethoxy)methane	17 U	17.	170	ug/kg	78		70-118		
bis(2-Chloroethyl)ether	17 U	17.	170	ug/kg	82		70-104		
bis(2-Chloroisopropyl)ether	17 U	17.	170	ug/kg	82		68-131		
2-Chloronaphthalene	17 U	17.	170	ug/kg	70		49-128		
2-Chlorophenol	17 U	17.	170	ug/kg	93		72-112		
4-Chlorophenyl-phenylether	33 U	33.	170	ug/kg	84		79-110		
Chrysene	17 U	17.	170	ug/kg	85		76-113		
Dibenz(a,h)anthracene	17 U	17.	170	ug/kg	82		70-128		
Dibenzofuran	17 U	17.	170	ug/kg	86		79-108		
1,2-Dichlorobenzene	17 U	17.	170	ug/kg	80		79-102		
1,3-Dichlorobenzene	17 U	17.	170	ug/kg	77		70-98		
1,4-Dichlorobenzene	17 U	17.	170	ug/kg	78		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	55		24-101		
2,4-Dichlorophenol	17 U	17.	170	ug/kg	88		75-111		
Diethylphthalate	17 U	17.	170	ug/kg	89		76-111		
2,4-Dimethylphenol	33 U	33.	170	ug/kg	85		72-111		
3,5-Dimethylphenol	33 U	33.	170	ug/kg	94		70-130		
Dimethylphthalate	17 U	17.	170	ug/kg	85		77-109		
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	80		53-110		
2,4-Dinitrophenol	330 U	330.	1,000	ug/kg	88		37-120		
2,4-Dinitrotoluene	33 U	33.	170	ug/kg	97		73-115		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	88		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	77		77-111		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	90		75-117		
Fluoranthene	17 U	17.	170	ug/kg	89		78-116		
Fluorene	17 U	17.	170	ug/kg	87		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	75*		78-116		
Hexachlorobutadiene	67 U	67.	170	ug/kg	66*		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	70		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	76		68-105		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	86		64-119		
Isophorone	17 U	17.	170	ug/kg	82		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	84		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	81		76-105		
2-Methylphenol	33 U	33.	170	ug/kg	93		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	98		66-117		
Naphthalene	17 U	17.	170	ug/kg	79		73-106		
2-Nitroaniline	17 U	17.	170	ug/kg	95		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	88		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	76		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	79		71-104		
2-Nitrophenol	17 U	17.	170	ug/kg	80*		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	90		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	88		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	76		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	81		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	87		68-130		
Pentachlorophenol	170 U	170.	500	ug/kg	77		51-117		
Phenanthrene	17 U	17.	170	ug/kg	81		77-113		
Phenol	17 U	17.	170	ug/kg	97		58-112		
Pyrene	17 U	17.	170	ug/kg	87		75-115		
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	74		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	87		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	84		78-111		
Batch number: 11145SLF026 Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	94		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	86		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	94		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	100		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	119		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	129		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	122		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	132		54-142		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	102		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	109		75-137		
Chrysene	0.33 U	0.33	1.7	ug/kg	103		73-114		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	123		53-138		
Diethylphthalate	6.0 U	6.0	18	ug/kg	103		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	101		79-121		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	110		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	103		64-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	99		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	123		56-134		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	93		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	83		62-120		

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67 U	0.67	1.7	ug/kg	88		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	82		55-118		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	134		55-176		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	99		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	100		56-121		

Batch number: 11146SLE026
N-Nitrosodimethylamine

Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054
16.7 U 16.7 33.3 ng/kg 83 70-130

Batch number: 11146WAD026

Sample number(s): 6296055

Aniline	1 U	1.	5	ug/l	71	76	49-101	6	30
Benzidine	20 U	20.	60	ug/l	68	74	34-117	9	30
Benzoic acid	6 U	6.	15	ug/l	44	26	10-69	51*	30
Benzyl alcohol	5 U	5.	15	ug/l	81	79	66-97	2	30
4-Bromophenyl-phenylether	1 U	1.	5	ug/l	91	92	82-117	0	30
Carbazole	1 U	1.	5	ug/l	96	94	81-114	2	30
4-Chloro-3-methylphenol	1 U	1.	5	ug/l	96	91	70-123	5	30
4-Chloroaniline	1 U	1.	5	ug/l	70	80	42-124	13	30
bis(2-Chloroethoxy)methane	1 U	1.	5	ug/l	92	93	74-124	1	30
bis(2-Chloroethyl)ether	1 U	1.	5	ug/l	91	89	77-108	2	30
bis(2-Chloroisopropyl)ether	1 U	1.	5	ug/l	91	90	62-127	1	30
2-Chloronaphthalene	2 U	2.	5	ug/l	95	97	54-132	2	30
2-Chlorophenol	1 U	1.	5	ug/l	97	92	77-108	6	30
4-Chlorophenyl-phenylether	2 U	2.	5	ug/l	93	92	82-111	1	30
Dibenzofuran	1 U	1.	5	ug/l	94	93	83-108	1	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	86	84	55-118	2	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	86	85	50-119	1	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	86	84	53-119	2	30
3,3'-Dichlorobenzidine	2 U	2.	5	ug/l	67	74	49-111	10	30
2,4-Dichlorophenol	1 U	1.	5	ug/l	95	90	80-109	5	30
2,4-Dimethylphenol	3 U	3.	10	ug/l	96	92	72-110	4	30
3,5-Dimethylphenol	3 U	3.	10	ug/l	104	99	70-130	4	30
4,6-Dinitro-2-methylphenol	5 U	5.	15	ug/l	100	93	78-119	8	30
2,4-Dinitrophenol	10 U	10.	30	ug/l	100	84	52-131	18	30
2,4-Dinitrotoluene	1 U	1.	5	ug/l	98	96	81-115	2	30
2,6-Dinitrotoluene	1 U	1.	5	ug/l	96	94	85-115	3	30
1,2-Diphenylhydrazine	1 U	1.	5	ug/l	99	96	78-116	3	30
Hexachlorobenzene	1 U	1.	5	ug/l	94	92	81-118	2	30
Hexachlorobutadiene	1 U	1.	5	ug/l	90	88	57-124	2	30
Hexachlorocyclopentadiene	5 U	5.	15	ug/l	77	76	36-118	1	30
Hexachloroethane	1 U	1.	5	ug/l	82	81	52-113	1	30
Isophorone	1 U	1.	5	ug/l	94	94	74-117	0	30
2-Methylphenol	1 U	1.	5	ug/l	84	82	64-101	3	30
4-Methylphenol	2 U	2.	5	ug/l	78	76	61-103	2	30
2-Nitroaniline	1 U	1.	5	ug/l	99	96	83-116	3	30
3-Nitroaniline	1 U	1.	5	ug/l	95	91	74-113	4	30
4-Nitroaniline	1 U	1.	5	ug/l	78	79	59-100	1	30
Nitrobenzene	1 U	1.	5	ug/l	92	92	75-109	0	30
2-Nitrophenol	1 U	1.	5	ug/l	93	93	86-120	0	30
4-Nitrophenol	10 U	10.	30	ug/l	47	46	16-78	2	30
N-Nitroso-di-n-propylamine	1 U	1.	5	ug/l	91	90	69-110	1	30
N-Nitrosodiphenylamine	2 U	2.	5	ug/l	94	92	67-136	2	30
Pentachlorophenol	3 U	3.	15	ug/l	98	90	53-110	8	30
Phenol	1 U	1.	5	ug/l	41	39	21-67	5	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	88	87	71-112	2	30
2,4,5-Trichlorophenol	1 U	1.	5	ug/l	98	93	79-107	6	30
2,4,6-Trichlorophenol	1 U	1.	5	ug/l	96	94	81-113	1	30

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11151A20A TPH-GRO S.CA water C5-C12	Sample number(s): 6296041 20 U 20.	50		ug/l	109	109	75-135	0	30
Batch number: 11151B34A 9a TPH by EPA 8015B Gas C5-C12	Sample number(s): 6296036 0.2 U 0.2	1.0		mg/kg	68	74	67-119	8	30
Batch number: 111510006A	Sample number(s): 6296035-6296038, 6296042-6296043, 6296045-6296049, 6296051, 6296054								
4-Amino-2,6-Dinitrotoluene	60 U 60.	120		ug/kg	112		80-120		
2-Amino-4,6-Dinitrotoluene	40 U 40.	120		ug/kg	110		80-120		
2,6-Diamino-4-nitrotoluene	80 U 80.	240		ug/kg	100	96	54-134	3	30
2,4-Diamino-6-nitrotoluene	80 U 80.	240		ug/kg	99	96	54-134	3	30
1,3-Dinitrobenzene	40 U 40.	120		ug/kg	113		51-171		
2,4-Dinitrotoluene	40 U 40.	120		ug/kg	106		72-135		
2,6-Dinitrotoluene	40 U 40.	120		ug/kg	110		80-120		
HMX	100 U 100.	300		ug/kg	97		74-130		
Nitrobenzene	40 U 40.	120		ug/kg	110		80-120		
Nitroglycerin	800 U 800.	2,400		ug/kg	86		80-120		
2-Nitrotoluene	80 U 80.	120		ug/kg	107		78-128		
3-Nitrotoluene	100 U 100.	120		ug/kg	113		73-127		
4-Nitrotoluene	80 U 80.	120		ug/kg	106		80-120		
PETN	800 U 800.	2,400		ug/kg	116		80-120		
RDX	50 U 50.	120		ug/kg	100		75-131		
Tetryl	61 U 61.	120		ug/kg	104		70-168		
1,3,5-Trinitrobenzene	40 U 40.	120		ug/kg	107		77-137		
2,4,6-Trinitrotoluene	40 U 40.	120		ug/kg	111		80-120		
Batch number: 111580002A	Sample number(s): 6296055								
4-Amino-2,6-Dinitrotoluene	0.30 U 0.30	0.60		ug/l	110	110	80-120	0	30
2-Amino-4,6-Dinitrotoluene	0.20 U 0.20	0.60		ug/l	100	110	80-120	10	30
2,6-Diamino-4-nitrotoluene	0.20 U 0.20	0.60		ug/l	100	103	50-122	3	30
2,4-Diamino-6-nitrotoluene	0.20 U 0.20	0.60		ug/l	100	103	50-122	3	30
1,3-Dinitrobenzene	0.20 U 0.20	0.60		ug/l	110	110	72-117	0	30
2,4-Dinitrotoluene	0.20 U 0.20	0.60		ug/l	100	100	80-120	0	30
2,6-Dinitrotoluene	0.20 U 0.20	0.60		ug/l	110	110	80-120	0	30
HMX	0.65 U 0.65	2.0		ug/l	100	100	65-125	0	30
Nitrobenzene	0.20 U 0.20	0.60		ug/l	100	100	75-121	0	30
Nitroglycerin	5.2 U 5.2	15		ug/l	92	92	80-120	0	30
2-Nitrotoluene	0.20 U 0.20	0.60		ug/l	100	100	74-120	0	30
3-Nitrotoluene	0.40 U 0.40	1.2		ug/l	110*	110*	69-107	0	30
4-Nitrotoluene	0.60 U 0.60	1.2		ug/l	100	100	80-120	0	30
PETN	6.0 U 6.0	18		ug/l	117	117	80-120	0	30
RDX	0.20 U 0.20	0.60		ug/l	97	96	70-125	1	30
Tetryl	0.40 U 0.40	0.60		ug/l	100	99	72-141	1	30
1,3,5-Trinitrobenzene	0.20 U 0.20	0.60		ug/l	99	96	53-129	3	30
2,4,6-Trinitrotoluene	0.20 U 0.20	0.60		ug/l	100	100	76-109	0	30
Batch number: 111440027A 25b Formaldehyde 8315A	Sample number(s): 6296055 10 U 10.	50		ug/l	62*	68*	69-130	9	30
Batch number: 111520004A 25a Formaldehyde 8315A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 600 600.	1,500		ug/kg	94		80-126		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 111450014A	Sample number(s): 6296055								
2,4-D	0.16 U	0.16	0.50	ug/l	120	116	73-157	3	30
Dalapon	0.25 U	0.25	1.3	ug/l	63	70	40-100	10	30
2,4-DB	0.30 U	0.30	1.0	ug/l	116	112	65-130	4	30
Dicamba	0.080 U	0.080	0.30	ug/l	96	92	68-135	4	30
Dinoseb	0.10 U	0.10	0.50	ug/l	74	74	32-91	0	30
2,4-DP (Dichlorprop)	0.16 U	0.16	0.50	ug/l	124	120	76-170	3	30
MCPA	300 U	300.	1,000	ug/l	90	88	65-128	2	30
MCP	50 U	50.	200	ug/l	96	96	67-137	0	30
2,4,5-T	0.015 U	0.015	0.050	ug/l	112	108	63-147	4	30
2,4,5-TP	0.010 U	0.010	0.050	ug/l	104	108	63-134	4	30
Batch number: 111450020A	Sample number(s): 6296042-6296049, 6296051-6296054, 6296056								
2,4-D	1.2 U	1.2	3.6	ug/kg	95		73-146		
Dalapon	4.4 U	4.4	9.0	ug/kg	49		11-116		
2,4-DB	0.62 U	0.62	1.7	ug/kg	100		62-131		
Dicamba	0.40 U	0.40	1.2	ug/kg	78		54-121		
Dinoseb	0.80 U	0.80	2.4	ug/kg	8*		10-36		
2,4-DP (Dichlorprop)	0.80 U	0.80	1.7	ug/kg	103		62-170		
MCPA	76 U	76.	250	ug/kg	71		60-130		
MCP (Mecoprop)	75 U	75.	250	ug/kg	101		54-137		
2,4,5-T	0.082 U	0.082	0.17	ug/kg	90		73-143		
2,4,5-TP	0.075 U	0.075	0.17	ug/kg	83		68-114		
Batch number: 111520014A	Sample number(s): 6296036, 6296039-6296040, 6296042, 6296054								
6a Perchlorate EPA 6850	2.1 U	2.1	5.0	ug/kg	104		85-115		
Batch number: 111460034A	Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056								
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	81		36-106		
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	98		72-120		
PCB-1221	0.33 U	0.33	1.7	ug/kg					
PCB-1232	0.33 U	0.33	1.7	ug/kg					
PCB-1242	0.33 U	0.33	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.39 U	0.39	1.7	ug/kg	103		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 111460040A	Sample number(s): 6296055								
Aldrin	0.0020 U	0.0020	0.010	ug/l	101	111	54-159	10	30
Alpha BHC	0.0030 U	0.0030	0.010	ug/l	110	110	59-146	0	30
Beta BHC	0.0029 U	0.0029	0.010	ug/l	103	103	73-147	0	30
Gamma BHC - Lindane	0.0020 U	0.0020	0.010	ug/l	110	110	68-128	0	30
Chlordane	0.12 U	0.12	0.50	ug/l					
p,p-DDD	0.0050 U	0.0050	0.020	ug/l	120	120	71-139	0	30
p,p-DDE	0.0050 U	0.0050	0.020	ug/l	111	116	66-130	5	30
p,p-DDT	0.0050 U	0.0050	0.020	ug/l	114	114	53-126	0	30
Delta BHC	0.0029 U	0.0029	0.010	ug/l	113	113	76-148	0	30
Dieldrin	0.0053 U	0.0053	0.020	ug/l	125	125	76-132	0	30
Endosulfan I	0.0043 U	0.0043	0.010	ug/l	120	120	68-128	0	30
Endosulfan II	0.59 U	0.15	0.020	ug/l	110	110	59-144	0	30
Endosulfan Sulfate	0.0058 U	0.0058	0.020	ug/l	110	115	71-142	4	30
Endrin	0.0081 U	0.0081	0.020	ug/l	85	105	52-132	21	30
Endrin Aldehyde	0.020 U	0.020	0.10	ug/l	115	115	68-139	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Endrin Ketone	0.0050 U	0.0050	0.020	ug/l	130	125	69-146	4	30
Heptachlor	0.0026 U	0.0026	0.010	ug/l	120	130*	57-126	8	30
Heptachlor Epoxide	0.0023 U	0.0023	0.010	ug/l	102	112	73-156	10	30
Methoxychlor	0.030 U	0.030	0.10	ug/l	120	120	52-133	0	30
Mirex	0.085 U	0.085	0.25	ug/l					
Toxaphene	1.0 U	1.0	3.0	ug/l					

Batch number: 111460041A	Sample number(s): 6296055								
Aroclor 5432	0.10 U	0.10	0.50	ug/l					
Aroclor 5442	0.10 U	0.10	0.50	ug/l	72	84	35-84	15	30
Aroclor 5460	0.10 U	0.10	0.50	ug/l					
PCB-1016	0.10 U	0.10	0.50	ug/l	104	100	51-128	4	30
PCB-1221	0.10 U	0.10	0.50	ug/l					
PCB-1232	0.20 U	0.20	0.50	ug/l					
PCB-1242	0.10 U	0.10	0.50	ug/l					
PCB-1248	0.10 U	0.10	0.50	ug/l					
PCB-1254	0.10 U	0.10	0.50	ug/l					
PCB-1260	0.15 U	0.15	0.50	ug/l	96	102	56-135	6	30
PCB-1262	0.20 U	0.20	0.50	ug/l					
PCB-1268	0.16 U	0.16	0.50	ug/l					

Batch number: 111470004A	Sample number(s): 6296042-6296049, 6296051-6296054, 6296056								
Aldrin	0.066 U	0.066	0.17	ug/kg	79		44-135		
Alpha BHC	0.034 U	0.034	0.17	ug/kg	112		38-130		
Beta BHC	0.060 U	0.060	0.17	ug/kg	91		56-134		
Gamma BHC - Lindane	0.034 U	0.034	0.17	ug/kg	115		46-127		
Chlordane	0.80 U	0.80	3.4	ug/kg					
p,p-DDD	0.066 U	0.066	0.34	ug/kg	131		60-137		
p,p-DDE	0.066 U	0.066	0.34	ug/kg	95		59-141		
p,p-DDT	0.066 U	0.066	0.34	ug/kg	119		54-130		
Delta BHC	0.036 U	0.036	0.17	ug/kg	97		55-144		
Dieldrin	0.066 U	0.066	0.34	ug/kg	104		65-129		
Endosulfan I	0.044 U	0.044	0.17	ug/kg	100		45-123		
Endosulfan II	0.066 U	0.066	0.34	ug/kg	97		63-127		
Endosulfan Sulfate	0.066 U	0.066	0.34	ug/kg	112		72-138		
Endrin	0.066 U	0.066	0.34	ug/kg	110		62-129		
Endrin Aldehyde	0.066 U	0.066	0.34	ug/kg	94		55-132		
Endrin Ketone	0.066 U	0.066	0.34	ug/kg	98		69-139		
Heptachlor	0.060 U	0.060	0.17	ug/kg	100		43-124		
Heptachlor Epoxide	0.034 U	0.034	0.17	ug/kg	94		65-131		
Methoxychlor	0.34 U	0.34	1.7	ug/kg	126*		59-125		
Mirex	0.066 U	0.066	0.34	ug/kg					
Toxaphene	2.2 U	2.2	6.6	ug/kg					

Batch number: 111450031A	Sample number(s): 6296055								
EFH (C12-C14)	0.10 U	0.10	0.60	mg/l	100	92	69-125	8	30
EFH (C15-C20)	0.10 U	0.10	0.60	mg/l	104	96	77-125	8	30
EFH (C21-C30)	0.10 U	0.10	0.60	mg/l	100	92	68-124	8	30
EFH (C30 - C40)	0.10 U	0.10	0.60	mg/l	93	93	80-121	0	30
EFH (C8-C11)	0.10 U	0.10	0.60	mg/l	78	72	46-103	8	30

Batch number: 111480002A	Sample number(s): 6296042-6296043, 6296045-6296049, 6296051, 6296054								
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	96		71-118		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	100		76-122		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	100		69-132		
EFH (C30 - C40)	0.76 J	0.40	1.2	mg/kg	95		67-127		
EFH (C8-C11)	0.40 U	0.40	1.2	mg/kg	73		54-107		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 111570011A	Sample number(s): 6296036								
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	88		71-118		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	94		76-122		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	99		69-132		
EFH (C30 - C40)	0.40 U	0.40	1.2	mg/kg	92		67-127		
EFH (C8-C11)	0.40 J	0.40	1.2	mg/kg	70		54-107		
Batch number: 111450001A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054								
Diethylene glycol	5.0 U	5.0	10	mg/kg	90		75-125		
Ethylene glycol	5.0 U	5.0	10	mg/kg	92		65-122		
Propylene glycol	5.0 U	5.0	10	mg/kg	90		75-125		
Batch number: 111450035A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054								
Ethanol	100 U	100.	500	ug/kg	91		71-129		
Isopropanol	100 U	100.	500	ug/kg	92		75-125		
Methanol	100 U	100.	500	ug/kg	94		68-129		
Batch number: 111450009A	Sample number(s): 6296055								
m-Terphenyl	0.080 U	0.080	0.25	mg/l	79	79	75-125	0	20
o-Terphenyl	0.080 U	0.080	0.25	mg/l	94	91	75-125	3	20
p-Terphenyl	0.080 U	0.080	0.25	mg/l	88	86	75-125	2	20
Batch number: 111510027A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	87		75-125		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	101		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	95		75-125		
Batch number: 111441848008	Sample number(s): 6296055								
Aluminum	0.0834 U	0.0834	0.200	mg/l	96	97	90-112	1	20
Boron	0.0138 U	0.0138	0.0500	mg/l	92	93	89-110	1	20
Calcium	0.0702 U	0.0702	0.200	mg/l	100	100	90-112	0	20
Iron	0.0522 U	0.0522	0.200	mg/l	100	101	90-112	2	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	97	97	80-120	0	20
Magnesium	0.0172 U	0.0172	0.100	mg/l	98	99	89-110	0	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	100	101	90-110	1	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	97	98	80-120	1	20
Potassium	0.239 U	0.239	0.500	mg/l	97	95	85-115	3	20
Sodium	0.433 U	0.433	1.00	mg/l	96	96	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	99	101	90-110	2	20
Tin	0.0098 U	0.0098	0.0200	mg/l	97	98	90-110	1	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	99	101	90-113	1	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	102	80-120	1	20
Batch number: 111446050005A	Sample number(s): 6296055								
Antimony	0.00030 U	0.00030	0.0010	mg/l	101	98	87-110	3	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	101	108	86-111	7	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	110	107	90-112	3	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	104	105	90-114	1	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	105	102	90-118	3	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	100	99	87-113	1	20
Copper	0.00038 U	0.00038	0.0020	mg/l	99	97	90-113	2	20
Lead	0.00052 U	0.0005	0.0010	mg/l	105	104	90-115	2	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	104	105	90-113	1	20
Silver	0.00080 U	0.0008	0.00050	mg/l	102	104	90-115	2	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Vanadium	0.00016 U	0.00016	0.00050	mg/l	106	102	89-116	5	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	105	105	90-116	0	20
Batch number: 111446050005B	Sample number(s): 6296055								
Selenium	0.00025 U	0.00025	0.0020	mg/l	98	101	85-114	3	20
Batch number: 111446050005C	Sample number(s): 6296055								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	102	103	89-115	1	20
Batch number: 111446050005D	Sample number(s): 6296055								
Barium	0.00053 U	0.00053	0.0020	mg/l	105	102	88-113	3	20
Batch number: 111465713002	Sample number(s): 6296055								
Mercury	0.000046 U	0.00004	0.00020	mg/l	97	97	80-120	1	20
Batch number: 111515708001	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								
Aluminum	5.03 U	5.03	20.0	mg/kg	104		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	96		78-110		
Calcium	6.13 U	6.13	20.0	mg/kg	101		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	106		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	105		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	103		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	105		89-112		
Phosphorus	1.10 J	0.560	10.0	mg/kg	104		80-120		
Potassium	18.0 U	18.0	50.0	mg/kg	103		78-110		
Sodium	37.3 U	37.3	100	mg/kg	101		87-110		
Strontium	0.0620 U	0.0620	0.500	mg/kg	101		86-110		
Tin	1.58 J	1.00	10.0	mg/kg	103		90-114		
Titanium	0.380 U	0.380	1.00	mg/kg	120		80-120		
Zirconium	0.840 U	0.840	5.00	mg/kg	102		80-120		
Batch number: 111515711001	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								
Mercury	0.0029 U	0.0029	0.0997	mg/kg	91		88-123		
Batch number: 111536050004A	Sample number(s): 6296055								
Thallium	0.00015 U	0.00015	0.00050	mg/l	105	106	89-116	1	20
Batch number: 111541026001A	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								
Antimony	0.0600 U	0.0600	0.200	mg/kg	121		27-181		
Arsenic	0.0800 U	0.0800	0.400	mg/kg	102		83-113		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	100		86-111		
Cadmium	0.0400 U	0.0400	0.100	mg/kg	105		82-118		
Chromium	0.120 U	0.120	0.400	mg/kg	109		80-120		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	100		82-118		
Copper	0.0807 J	0.0660	0.400	mg/kg	97		83-110		
Lead	0.0104 U	0.0104	0.200	mg/kg	100		83-110		
Nickel	0.100 U	0.100	0.400	mg/kg	101		81-110		
Silver	0.0120 U	0.0120	0.100	mg/kg	102		81-111		
Thallium	0.0300 U	0.0300	0.100	mg/kg	99		83-110		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	102		84-116		
Zinc	0.560 U	0.560	3.00	mg/kg	102		81-112		
Batch number: 111541026001B	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								
Selenium	0.0400 U	0.0400	0.400	mg/kg	102		83-111		
Batch number: 111541026001C	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	114		78-122		
Batch number: 111541026001D	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								
Barium	0.108 U	0.108	0.400	mg/kg	101		81-111		
Batch number: 11143495401B	Sample number(s): 6296055								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	103	102	90-110	1	20
Batch number: 11144196901B	Sample number(s): 6296055								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	91	91	90-110	1	20
Batch number: 11146117101B	Sample number(s): 6296055								
17b Cyanide by 9012B	0.0050 U	0.0050	0.010	mg/l	103	102	90-110	2	20
Batch number: 11151102201A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296048, 6296050, 6296054								
17a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	107		80-120		
Batch number: 11151102201B	Sample number(s): 6296051								
17a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	107		80-120		
Batch number: 11151621202A	Sample number(s): 6296035-6296040, 6296042-6296045								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	98		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	98		90-110		
Batch number: 11151621202B	Sample number(s): 6296046-6296048, 6296050-6296054, 6296056								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	98		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	98		90-110		
Batch number: 11152243201A	Sample number(s): 6296035-6296040, 6296042-6296048, 6296050-6296054, 6296056								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	98		80-120		
Batch number: 11153621201A	Sample number(s): 6296035-6296040, 6296042-6296045								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	96		85-115		
Batch number: 11153621201B	Sample number(s): 6296046-6296048, 6296050-6296054, 6296056								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	96		85-115		
Batch number: 11154621701A	Sample number(s): 6296055								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	98	99	85-115	0	20
Batch number: 11144020001A	Sample number(s): 6296055								
18b pH by 9040B					100	100	90-110	0	3
Batch number: 11145039403A	Sample number(s): 6296035-6296040, 6296042-6296044								
18a pH by 9045C					100		95-105		
Batch number: 11145039403B	Sample number(s): 6296045-6296047, 6296050-6296054, 6296056								
18a pH by 9045C					100		95-105		
Batch number: 11153162401B	Sample number(s): 6296039-6296040, 6296044, 6296052-6296053, 6296056								
Moisture Content by 160.3					100		80-120		
Batch number: 11160162402A	Sample number(s): 6296035-6296038, 6296042-6296043, 6296045-6296050								
28a Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		
Batch number: 11160162402B	Sample number(s): 6296051, 6296054								

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: E111462AA	Sample number(s): 6296035-6296037, 6296039 UNSPK: P298873								
1,4-Dioxane	103	111	70-130	18	30				
Batch number: 11145SLD026	Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056 UNSPK: 6296047								
Acenaphthene	95	98	75-115	3	30				
Acenaphthylene	100	102	81-110	2	30				
Aniline	73	76	35-95	3	30				
Anthracene	98	98	75-115	0	30				
Benidine	26*	29*	35-141	12	30				
Benzo(a)anthracene	101	99	65-122	2	30				
Benzo(a)pyrene	98	101	57-126	3	30				
Benzo(b)fluoranthene	97	99	59-125	2	30				
Benzo(g,h,i)perylene	101	101	59-127	1	30				
Benzo(k)fluoranthene	96	97	56-132	1	30				
Benzoic acid	57	62	10-173	9	30				
Benzyl alcohol	109	115	67-115	6	30				
4-Bromophenyl-phenylether	89	88	67-129	2	30				
Butylbenzylphthalate	112	108	73-134	4	30				
Di-n-butylphthalate	94	95	67-123	1	30				
Carbazole	99	101	64-120	2	30				
4-Chloro-3-methylphenol	109	111*	76-110	2	30				
4-Chloroaniline	76	82	23-95	8	30				
bis(2-Chloroethoxy)methane	89	91	75-104	3	30				
bis(2-Chloroethyl)ether	87	95	60-116	8	30				
bis(2-Chloroisopropyl)ether	86	93	55-142	7	30				
2-Chloronaphthalene	142*	83	50-141	53*	30				
2-Chlorophenol	101	106	73-121	5	30				
4-Chlorophenyl-phenylether	97	100	80-109	2	30				
Chrysene	99	99	62-128	0	30				
Dibenz(a,h)anthracene	102	101	65-125	1	30				
Dibenzofuran	100	101	71-112	1	30				
1,2-Dichlorobenzene	78	89	66-108	13	30				
1,3-Dichlorobenzene	75	85	63-109	12	30				
1,4-Dichlorobenzene	77	87	70-100	11	30				
3,3'-Dichlorobenzidine	77	78	16-119	1	30				
2,4-Dichlorophenol	103	103	78-117	0	30				
Diethylphthalate	99	101	66-118	1	30				
2,4-Dimethylphenol	93	95	78-110	3	30				
3,5-Dimethylphenol	106	107	70-130	0	30				
Dimethylphthalate	96	98	64-118	2	30				
4,6-Dinitro-2-methylphenol	78	70	24-116	10	30				
2,4-Dinitrophenol	66	53	20-143	22	30				
2,4-Dinitrotoluene	108	109	73-113	1	30				
2,6-Dinitrotoluene	102	102	69-123	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,2-Diphenylhydrazine	93	94	71-129	1	30				
bis(2-Ethylhexyl)phthalate	113	106	63-122	6	30				
Fluoranthene	91	96	73-112	5	30				
Fluorene	101	104	77-111	3	30				
Hexachlorobenzene	93	95	77-114	1	30				
Hexachlorobutadiene	71	78	62-120	10	30				
Hexachlorocyclopentadiene	68	71	10-153	4	30				
Hexachloroethane	71	81	57-109	13	30				
Indeno(1,2,3-cd)pyrene	101	104	61-126	3	30				
Isophorone	94	96	73-102	3	30				
1-Methylnaphthalene	97	102	73-112	5	30				
2-Methylnaphthalene	91	94	76-114	3	30				
2-Methylphenol	99	105	75-111	6	30				
4-Methylphenol	108	111	71-111	3	30				
Naphthalene	88	91	72-116	3	30				
2-Nitroaniline	112	110	67-125	1	30				
3-Nitroaniline	111	112	59-122	0	30				
4-Nitroaniline	91	91	52-112	0	30				
Nitrobenzene	90	92	72-106	2	30				
2-Nitrophenol	99	97	74-115	2	30				
4-Nitrophenol	92	90	54-113	2	30				
N-Nitroso-di-n-propylamine	96	104	60-116	8	30				
N-Nitrosodimethylamine	86	88	47-116	2	30				
N-Nitrosodiphenylamine	92	94	86-145	2	30				
Di-n-octylphthalate	99	101	56-126	1	30				
Pentachlorophenol	86	84	28-127	2	30				
Phenanthrene	94	97	65-125	3	30				
Phenol	104	111	58-126	6	30				
Pyrene	110	102	74-126	8	30				
1,2,4-Trichlorobenzene	85	89	72-115	5	30				
2,4,5-Trichlorophenol	100	103	78-109	2	30				
2,4,6-Trichlorophenol	101	105	77-115	3	30				

Batch number: 11145SLF026

Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056 UNSPK:
6296047

Acenaphthene	102	97	63-105	5	30
Acenaphthylene	99	95	67-114	4	30
Anthracene	105	102	60-122	3	30
Benzo(a)anthracene	98	99	59-128	1	30
Benzo(a)pyrene	126	125	45-138	0	30
Benzo(b)fluoranthene	135	137	43-155	2	30
Benzo(g,h,i)perylene	84	74	33-141	13	30
Benzo(k)fluoranthene	129	130	42-144	1	30
Butylbenzylphthalate	104	111	57-173	6	30
Di-n-butylphthalate	122	117	65-148	4	30
Chrysene	98	100	48-134	2	30
Dibenz(a,h)anthracene	96	86	22-133	11	30
Diethylphthalate	106	103	70-136	4	30
Dimethylphthalate	104	101	74-118	3	30
Bis(2-Ethylhexyl)phthalate	103	101	39-167	2	30
Fluoranthene	112	119	26-166	6	30
Fluorene	105	101	66-122	4	30
Indeno(1,2,3-cd)pyrene	93	84	21-143	10	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1-Methylnaphthalene	101	94	72-123	7	30				
2-Methylnaphthalene	91	85	64-103	7	30				
Naphthalene	97	89	61-102	9	30				
N-Nitrosodimethylamine	102	96	48-113	6	30				
Di-n-octylphthalate	140	142	40-192	1	30				
Phenanthrene	103	104	12-165	0	30				
Pyrene	89	94	15-153	6	30				
Batch number: 11146SLE026	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047								
N-Nitrosodimethylamine	24*	24*	70-130	1	30				
Batch number: 11151B34A	Sample number(s): 6296036 UNSPK: P302747								
9a TPH by EPA 8015B Gas C5-C12	61	62	39-118	5	30				
Batch number: 111510006A	Sample number(s): 6296035-6296038, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047								
4-Amino-2,6-Dinitrotoluene	113	110	80-127	3	50				
2-Amino-4,6-Dinitrotoluene	112	110	80-137	2	50				
1,3-Dinitrobenzene	116	114	38-166	2	50				
2,4-Dinitrotoluene	108	107	80-131	1	50				
2,6-Dinitrotoluene	111	109	80-127	1	50				
HMX	100	96	63-128	4	50				
Nitrobenzene	112	113	80-125	1	50				
Nitroglycerin	101	99	80-120	2	50				
2-Nitrotoluene	106	105	80-122	1	50				
3-Nitrotoluene	114	112	72-119	1	50				
4-Nitrotoluene	105	104	80-125	1	50				
PETN	127*	122*	80-121	4	50				
RDX	93	91	75-129	2	50				
Tetryl	92	80	55-174	13	50				
1,3,5-Trinitrobenzene	108	105	82-126	3	50				
2,4,6-Trinitrotoluene	112	108	82-130	3	50				
Batch number: 111520004A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047								
25a Formaldehyde 8315A	97	97	80-120	0	50				
Batch number: 111450020A	Sample number(s): 6296042-6296049, 6296051-6296054, 6296056 UNSPK: 6296047								
2,4-D	102	94	17-180	9	35				
Dalapon	58	46	10-125	24	50				
2,4-DB	62	68	10-201	9	50				
Dicamba	86	72	10-190	17	50				
Dinoseb	9*	7*	10-46	27	35				
2,4-DP (Dichlorprop)	100	87	33-178	15	50				
MCPA	89	74	10-213	18	50				
MCPP (Mecoprop)	70	78	10-184	11	50				
2,4,5-T	70	59	10-156	17	35				
2,4,5-TP	59	51	24-141	12	35				
Batch number: 111520014A	Sample number(s): 6296036, 6296039-6296040, 6296042, 6296054 UNSPK: 6296036								
6a Perchlorate EPA 6850	103	107	80-120	3	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 111460034A	Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056 UNSPK: 6296047								
PCB-1016	87	109	29-146	22	50				
PCB-1260	98	109	39-149	11	50				
Batch number: 111470004A	Sample number(s): 6296042-6296049, 6296051-6296054, 6296056 UNSPK: 6296047								
Aldrin	39	45	16-126	14	50				
Alpha BHC	58	61	10-129	5	50				
Beta BHC	47	53	14-147	13	50				
Gamma BHC - Lindane	64	64	10-140	0	50				
p,p-DDD	51	56	16-163	8	50				
p,p-DDE	62	49	18-161	22	50				
p,p-DDT	95	134	10-176	21	50				
Delta BHC	50	53	23-140	6	50				
Dieldrin	62	47	19-154	22	50				
Endosulfan I	36	42	16-137	15	50				
Endosulfan II	31	52	28-154	52*	50				
Endosulfan Sulfate	57	57	21-160	0	50				
Endrin	48	55	11-149	12	50				
Endrin Aldehyde	39	34	10-148	17	35				
Endrin Ketone	33	43	22-165	24	50				
Heptachlor	70	76	13-126	8	50				
Heptachlor Epoxide	42	53	13-157	19	50				
Methoxychlor	72	96	32-147	28	50				
Batch number: 111480002A	Sample number(s): 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	40 (2)	118 (2)	49-123	15	20				
EFH (C21-C30)	-198 (2)	1919 (2)	49-123	63*	20				
EFH (C30 - C40)	-1805 (2)	3790 (2)	49-123	50*	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 111570011A	Sample number(s): 6296036 UNSPK: P301476								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	-196 (2)	-43 (2)	49-123	26*	20				
EFH (C21-C30)	-889 (2)	-1432 (2)	49-123	31*	20				
EFH (C30 - C40)	-226 (2)	-1853 (2)	49-123	25*	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 111450001A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047								
Diethylene glycol	40*	39*	59-109	4	20				
Ethylene glycol	60*	60*	63-107	1	20				
Propylene glycol	68	68	63-107	0	20				
Batch number: 111450035A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047								
Ethanol	66	64	48-130	2	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Isopropanol	71	71	12-149	1	20				
Methanol	71	69	43-138	2	20				
Batch number: 111510027A Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047									
m-Terphenyl	82	80	75-125	2	20				
o-Terphenyl	98	95	75-125	4	20				
p-Terphenyl	94	93	75-125	1	20				
Batch number: 111515708001 Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG: 6296047									
Aluminum	1488 (2)	2387 (2)	75-125	6	20	26,300	26,700	2	20
Boron	99	99	84-115	2	20	2.45 J	1.62 J	41* (1)	20
Calcium	-2319 (2)	-1985 (2)	75-125	15	20	16,100	7,380	74*	20
Iron	677 (2)	-340 (2)	75-125	4	20	27,900	27,800	0	20
Lithium	101	103	82-114	4	20	22.7	23.2	2	20
Magnesium	222 (2)	309 (2)	75-125	3	20	5,790	6,030	4	20
Manganese	138 (2)	29 (2)	75-125	12	20	393	379	4	20
Phosphorus	128*	89	75-125	8	20	311	300	4	20
Potassium	161*	154*	75-125	1	20	3,830	3,840	0	20
Sodium	98	98	75-125	1	20	124	122	2 (1)	20
Strontium	93	94	75-115	2	20	36.4	34.3	6	20
Tin	88	87	80-110	1	20	2.80 J	2.75 J	2 (1)	20
Titanium	215 (2)	285 (2)	75-125	4	20	1,450	1,410	3	20
Zirconium	94	94	75-125	2	20	6.08	5.92	3 (1)	20
Batch number: 111515711001 Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG: 6296047									
Mercury	102	90	65-135	7	20	0.0403 J	0.0135 J	100* (1)	20
Batch number: 111541026001A Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG: 6296047									
Antimony	60*	74*	75-125	14	20	0.445	0.258	53* (1)	20
Arsenic	89	143*	75-125	11	20	7.11	5.29	29*	20
Beryllium	97	122	75-125	11	20	0.875	0.676	26*	20
Cadmium	103	135*	75-125	18	20	0.633	0.325	64* (1)	20
Chromium	100	85	75-125	4	20	26.2	24.7	6	20
Cobalt	91	90	75-125	0	20	11.3	8.28	31*	20
Copper	102	144*	75-125	13	20	19.8	14.9	28*	20
Lead	121 (2)	249 (2)	75-125	16	20	17.4	15.0	15	20
Nickel	158*	145*	75-125	3	20	25.1	17.9	34*	20
Silver	126*	145*	75-125	14	20	0.0620 J	0.118	63* (1)	20
Thallium	107	150*	75-125	18	20	0.428	0.293	37* (1)	20
Vanadium	118 (2)	230 (2)	75-125	11	20	79.6	58.7	30*	20
Zinc	325 (2)	140 (2)	75-125	11	20	141	133	6	20
Batch number: 111541026001B Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG: 6296047									
Selenium	109	122	75-125	10	20	0.202 J	0.121 J	50* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 111541026001C	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG:								
Molybdenum	122	141*	75-125	13	20	1.31	0.990	28*	20
Batch number: 111541026001D	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG:								
Barium	31 (2)	-349 (2)	75-125	24*	20	173	121	35*	20
Batch number: 11151102201A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296048, 6296050, 6296054 UNSPK:								
17a Cyanide by 9012B	106		75-125			0.17	U 0.18	U 0 (1)	20
Batch number: 11151102201B	Sample number(s): 6296051 UNSPK: 6296051 BKG: 6296051								
17a Cyanide by 9012B	106		75-125			0.18	U 0.18	U 0 (1)	20
Batch number: 11151621202A	Sample number(s): 6296035-6296040, 6296042-6296045 UNSPK: 6296035 BKG: 6296035								
11a Anions by 300.0 - Fluoride	94		80-120			5.3	6.4	19	20
11a Anions by 300.0 - Nitrate	101		80-120			0.81	J 1.0	J 22* (1)	20
Batch number: 11151621202B	Sample number(s): 6296046-6296048, 6296050-6296054, 6296056 UNSPK: 6296047 BKG:								
11a Anions by 300.0 - Fluoride	55*		80-120			4.1	4.0	2 (1)	20
11a Anions by 300.0 - Nitrate	92		80-120			1.4	J 1.0	J 30* (1)	20
Batch number: 11152243201A	Sample number(s): 6296035-6296040, 6296042-6296048, 6296050-6296054, 6296056 UNSPK:								
3a Cr VI by EPA 7199	98		75-125			0.64	J 0.77	J 18 (1)	20
Batch number: 11153621201A	Sample number(s): 6296035-6296040, 6296042-6296045 UNSPK: 6296035 BKG: 6296035								
7a Perchlorate EPA 314.0	116		80-120			9.0	U 9.0	U 0 (1)	15
Batch number: 11153621201B	Sample number(s): 6296046-6296048, 6296050-6296054, 6296056 UNSPK: 6296047 BKG:								
7a Perchlorate EPA 314.0	118		80-120			9.0	U 9.0	U 0 (1)	15
Batch number: 11145039403A	Sample number(s): 6296035-6296040, 6296042-6296044 BKG: 6296035								
18a pH by 9045C						8.34	8.34	0	3
Batch number: 11145039403B	Sample number(s): 6296045-6296047, 6296050-6296054, 6296056 BKG: 6296047								
18a pH by 9045C						8.04	8.00	0	3
Batch number: 11153162401B	Sample number(s): 6296039-6296040, 6296044, 6296052-6296053, 6296056 BKG: 6296040								
Moisture Content by 160.3						13.1	13.8	6	20
Batch number: 11160162402A	Sample number(s): 6296035-6296038, 6296042-6296043, 6296045-6296050 BKG: 6296047								
28a Moisture Content by 160.3						12.9	12.9	0	20
Moisture Content by 160.3						12.9	12.9	0	20
Moisture Content by 160.3						12.9	12.9	0	20
Batch number: 11160162402B	Sample number(s): 6296051, 6296054 BKG: P301476								
Moisture Content by 160.3						9.5	9.8	2	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B

Batch number: B111471AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6296035	100	97	99	95
6296036	103	106	98	97
6296037	103	106	98	97
6296039	102	102	99	95
Blank	101	102	100	96
LCS	102	102	102	101
LCSD	100	100	102	100

Limits: 80-120 80-120 81-117 74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM

Batch number: E111461AA

Toluene-d8

6296041	106
Blank	106
LCS	106
LCSD	106

Limits: 80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM

Batch number: E111462AA

Toluene-d8

6296035	97
6296036	97
6296037	97
6296039	97
Blank	98
LCS	98
LCSD	98
MS	93
MSD	95

Limits: 70-130

Analysis Name: 1b Volatile Organics EPA8260

Batch number: L111471AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6296041	102	102	101	98
Blank	103	101	101	99
LCS	103	102	102	100
LCSD	102	102	103	101

Limits: 86-118 80-120 88-110 86-115

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Surrogate Quality Control

Analysis Name: 15b NDMA by 1625C
Batch number: 11144WAA026
N-Nitrosodimethylamine-
d6

6296055	106
Blank	97
LCS	96
LCSD	109

Limits: 50-150

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 11144WAK026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296055	100	95	103
Blank	93	91	89
LCS	106	94	97
LCSD	108	101	103

Limits: 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 11145SLD026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296035	94	90	95	84	81	88
6296036	94	90	99	83	81	89
6296037	96	93	96	83	83	88
6296038	87	84	93	76	75	81
6296039	92	90	87	77	74	81
6296040	98	92	96	80	80	91
6296042	85	85	87	79	84	73
6296043	95	92	92	88	89	84
6296044	80	79	85	77	82	73
6296045	91	87	96	85	91	83
6296046	91	88	92	85	90	82
6296047	96	92	104	81	81	88
6296048	101	94	104	85	83	90
6296049	103	95	104	86	84	86
6296051	92	86	93	86	90	77
6296052	92	86	95	86	89	80
6296053	76	74	83	75	78	74
6296054	92	88	93	87	89	79
6296056	87	85	90	84	88	74
Blank	91	90	101	84	84	76
LCS	90	86	91	74	69	72
MS	101	94	104	85	83	90
MSD	103	95	104	86	84	86

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11145SLF026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Surrogate Quality Control

6296035	90	88	102
6296036	95	91	107
6296037	94	89	102
6296038	93	90	105
6296039	96	90	104
6296040	84	90	101
6296042	93	94	96
6296043	91	91	94
6296044	96	93	93
6296045	97	96	96
6296046	104	100	101
6296047	103	100	105
6296048	115	103	100
6296049	109	99	98
6296051	102	99	103
6296052	100	97	101
6296053	97	95	96
6296054	89	86	90
6296056	81	76	84
Blank	103	103	108
LCS	109	100	103
MS	115	103	100
MSD	109	99	98
Limits:	40-130	45-130	45-135

Analysis Name: 15a NDMA by 1625C
Batch number: 11146SLE026
N-Nitrosodimethylamine-
d6

6296036	67
6296042	94
6296043	129
6296045	90
6296046	91
6296047	152*
6296048	164*
6296049	143
6296051	160*
6296054	145
Blank	91
LCS	104
MS	164*
MSD	143

Limits: 50-150

Analysis Name: 5b Semivolatiles by EPA 8270C
Batch number: 11146WAD026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296055	50	31	98	86	88	85
Blank	59	36	96	91	88	84
LCS	62	40	94	86	88	84
LCSD	60	39	92	86	87	85

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Surrogate Quality Control

Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 11151A20A
Trifluorotoluene-F

6296041	70
Blank	70
LCS	112
LCSD	108

Limits: 63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 11151B34A
Trifluorotoluene-F

6296036	71
Blank	76
LCS	79
LCSD	87
MS	74
MSD	74

Limits: 61-122

Analysis Name: 25b Formaldehyde 8315A
Batch number: 111440027A
Butyraldehyde

6296055	62
Blank	65
LCS	62
LCSD	64

Limits: 45-145

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 111450014A
2,4-Dichlorophenylacetic acid

6296055	90
Blank	92
LCS	109
LCSD	106

Limits: 35-144

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 111450020A
2,4-Dichlorophenylacetic acid

6296042	87
6296043	87

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Surrogate Quality Control

6296044 89
6296045 99
6296046 84
6296047 89
6296048 100
6296049 95
6296051 81
6296052 94
6296053 104
6296054 93
6296056 295*
Blank 79
LCS 83
MS 100
MSD 95

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 111460034A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6296035	104	94
6296036	105	94
6296037	100	96
6296038	97	90
6296039	107	100
6296040	107	79
6296042	82	82
6296043	99	94
6296044	107	105
6296045	112	93
6296046	105	78
6296047	108	88
6296048	106	85
6296049	98	82
6296051	103	88
6296052	101	86
6296053	121	105
6296054	113	90
6296056	68	55
Blank	121	107
LCS	120	109
MS	106	85
MSD	98	82

Limits: 53-139 45-120

Analysis Name: 12b Pesticides by 8081A

Batch number: 111460040A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6296055	94	58
Blank	100	88
LCS	98	107
LCSD	102	99

Limits: 52-141 40-144

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Surrogate Quality Control

Analysis Name: 8b PCBs/PCTs by 8082

Batch number: 111460041A

Tetrachloro-m-xylene Decachlorobiphenyl

6296055	112	55
Blank	116	86
LCS	119	70
LCSD	116	97

Limits: 30-150 30-150

Analysis Name: 12a Pesticides by 8081A

Batch number: 111470004A

Tetrachloro-m-xylene Decachlorobiphenyl

6296042	97	79
6296043	79	119
6296044	79	178*
6296045	81	93
6296046	62	55
6296047	53	67
6296048	50	83
6296049	57	102
6296051	67	61
6296052	74	79
6296053	61	93
6296054	75	67
6296056	22*	119
Blank	34*	42
LCS	82	103
MS	50	44
MSD	57	56

Limits: 50-130 20-120

Analysis Name: 16a Energetics by 8330A

Batch number: 111510006A

2-Nitro-m-xylene

6296035	133
6296036	127
6296037	132
6296038	124
6296042	123
6296043	118
6296045	120
6296046	129
6296047	125
6296048	126
6296049	122
6296051	123
6296054	123
Blank	119
LCS	126
LCSD	123
MS	126

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Surrogate Quality Control

MSD 122

Limits: 80-146

Analysis Name: 25a Formaldehyde 8315A
Batch number: 111520004A
Butyraldehyde

6296036	118
6296042	128*
6296043	130*
6296045	122
6296046	124
6296047	101
6296048	103
6296049	105
6296051	125
6296054	130*
Blank	83
LCS	100
MS	103
MSD	105

Limits: 64-126

Analysis Name: 16b Energetics by 8330A
Batch number: 111580002A
2-Nitro-m-xylene

6296055	110
Blank	106
LCS	104
LCSD	107

Limits: 50-134

Analysis Name: 21a Glycols by 8015B
Batch number: 111450001A
Tetramethylene glycol

6296036	84
6296042	90
6296043	93
6296045	89
6296046	87
6296047	86
6296048	86
6296049	85
6296051	83
6296054	81
Blank	90
LCS	98
MS	86
MSD	85

Limits: 29-137

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Surrogate Quality Control

Analysis Name: 20b Terphenyls by 8015B
Batch number: 111450009A
n-Triacontane-d62

6296055	27*
Blank	84
LCS	83
LCSD	80

Limits: 50-150

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel
Batch number: 111450031A
Chlorobenzene Orthoterphenyl

6296055	74	86
Blank	101	95
LCS	92	100
LCSD	84	94

Limits: 28-152 52-131

Analysis Name: 19a Alcohols by 8015B
Batch number: 111450035A
Acetone

6296036	73
6296042	70
6296043	72
6296045	69
6296046	70
6296047	70
6296048	74
6296049	76
6296051	68
6296054	68
Blank	87
LCS	86
MS	74
MSD	76

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 111480002A
Chlorobenzene Orthoterphenyl

6296042	86	106
6296043	87	101
6296045	74	100
6296046	56	81
6296047	85	98
6296048	81	93
6296049	97	107
6296051	55	89
6296054	70	114
Blank	83	94

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/20/11 at 09:34 AM

Group Number: 1248215

Surrogate Quality Control

LCS	86	97
MS	81	93
MSD	97	107

Limits:	37-125	47-145

Analysis Name: 20a Terphenyls by 8015B
Batch number: 111510027A
n-Triacontane-d62

6296036	92
6296042	110
6296043	159*
6296045	97
6296046	94
6296047	117
6296048	151*
6296049	130
6296051	77
6296054	108
Blank	92
LCS	94
MS	151*
MSD	130

Limits:	50-150

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 111570011A
Chlorobenzene Orthoterphenyl

6296036	72	89
Blank	77	93
LCS	89	95
MS	91	113
MSD	86	103

Limits:	37-125	47-145

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										VOCs		SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels ‡ Moisture by EPA 160.3 will be performed on soil in 16 oz jar collected from the same interval from which Encores were collected																													
Sample Signature: <i>AW</i> 5-23-11																													
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 80100-2083717A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PHS 8270 SM	PCBs/PCTs EPA 8082	*Dieldrin/EPA 1813B	*Permethrin EPA 314.0	*Hea Chlordane EPA 7109	*PAH EPA 8041C/8040B	*Pesticides Confirmation by EPA 8050 (10%)	VOCs EPA 8260B 5	1,4-Dioxane EPA 8260B 5	TPH/GRO EPA 8015B 5	*TPH/LEH EPA 8015B 10d	*Nitrate EPA 300.0	*Formaldehyde EPA 8315A	*N,N-DMA EPA 1625C	*Tergetics EPA 8330A	*Cyanide EPA 8012B	*Terphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohols EPA 8015B			
SL-084-SA5DN-SB-4.5	5/23/11	0925	SOIL	NONE	4-Encores										X	X													
SL-084-SA5DN-SB-4.0-5.0	5/23/11	0930	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X		X	X	X					X							
SL-089-SA5DN-SB-4.5	5/23/11	1020	SOIL	NONE	5-Encores																								
SL-089-SA5DN-SB-4.0-5.0	5/23/11	1025	SOIL	NONE	4-16 oz jars	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X		
SL-081-SA5DN-SB-4.5	5/23/11	1300	SOIL	NONE	5-Encores										X	X													
SL-081-SA5DN-SB-4.0-5.0	5/23/11	1310	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X							
SL-081-SA5DN-SB-9.0-10.0	5/23/11	1315	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X							
SL-075-SA5DN-SB-4.5	5/23/11	1535	SOIL	NONE	4-Encores										X	X													
SL-075-SA5DN-SB-4.0-5.0	5/23/11	1540	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X															
SL-075-SA5DN-SB-9.0-10.0	5/23/11	1545	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X															
TB-052311	5/23/11	0600	WATER	HCl	4-40 mL VOA VIALS										X	X	X												
Relinquished by: (Signature)		Date/Time 05/23/2011 / 1700		Received for Laboratory by: (Signature)												Laboratory: Lancaster Laboratories, Inc.													
Received by: (Signature)		Date/Time 5/24/11 10:40		Airbill No.(s) 8895 1441 7961, 7994, 8008, 7972, 7983																									

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS				SS ONLY	SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes			
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels § Moisture by EPA 100.3 will be performed on soil in 15 oz jar collected from the same interval from which Encores were collected							Metals EPA 8010/8020/8067/8717A	Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCB/PCP EPA 8082	Organophosphorus EPA 1631B	Perchlorate EPA 314.0	Hex. Chrom. EPA 7189	NH EPA 8040/8040B	Pesticides EPA 8061A (all) as per label	Herbicides EPA 8151 (all) as per label	TPH/EFH EPA 8015B Mod	Nitrate EPA 300.0	Formaldehyde EPA 8151A	NHMA EPA 1625C	Enthalpies EPA 8300A		Cyanide EPA 8012B	Terphenyls EPA 8015B	Glycols EPA 8015B
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																				
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	12-1 liter ambers			X	X	X				X	X	X				X	X		X		
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NaOH	1-500 mL glass																	X			
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-250 mL glass														X						
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-500 mL poly		X				X	X	X												
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HNO3	1-500 mL poly	X																			
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HCl	2-40 mL vial																				X
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	4-40 mL vial												X						X		
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																				Laboratory:	
		05/23/2011 / 1700																						Lancaster Laboratories, Inc.	
Received by: (Signature)		Date/Time		Airbill No.(s)																					
		5/23/2011 / 1700		8695 1441 7961, 7994, 8008, 7972, 7983																					

18013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS										SS ONLY		SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels § Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Enclones were collected						*Metals EPA 8010/8270/8471/1A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 B/H	PCB/PCP's EPA 8082	*Dioxin/FURF EPA 1613B	*Perchlorate EPA 314.0	*Mer Chroms EPA 7199	*H EPA 9045/9000/05	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8161 (surface soil only)	*Methyl Mercury EPA Method 1631	*Organotin NOAA Statute 1700a	*Formaldehyde EPA 8315A	*HNMAs EPA 1625C	*Energolites EPA 8330A	*Cyanide EPA 8012B	*Tetraphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohols EPA 8015B				
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																							
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Poly											X												
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Jars												X											
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	3-16 oz. Jars	X	X	X	X	X	X	X	X	X	X													
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Poly											X												
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Jars												X											
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X												
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X												
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																				Laboratory:				
		05/23/2011 / 1700																						Lancaster Laboratories, Inc.				
Received by: (Signature)		Date/Time		Airbill No.(s)																								
		5/24/2011		8695 1441 7961, 7994, 8008, 7972, 7983																								

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Tuesday, May 24, 2011 2:44 PM
To: Nicole Maljovec
Cc: Bloisa, Peggy
Subject: Corrections for SSFL COC 5.23.11

Attachments: COC_05_23_11_sediment(1).xlsx



COC_05_23_11_se
diment(1).xlsx ...

Hi Nicole

Now that the dust has settled, Peggy and I have found my mistakes from yesterday. I have attached new updated COCs. I have highlighted the changes in red or yellow. These include:

- 1) SED-035-SIV-SD on the first two lines of the "Sediment Hole" COC should be SED-035-SIV-SDMS. The are the MS/MSD sample.
- 2) DUP01-SIV-SD should be DUP03-SIV-QC-052311
- 3) FB07-SIV-SS-052311 should be FB08-SIV-052311
- 4) For the COC starting with the sample name SL-015-SA5DN-SS-0.0-0.5, SVOCs and PCBs should only be analyzed from the sleeves and not from the jars.
- 5) The 6-40mL vials for the equipment blank will ship today.

Thank you !!

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SS ONLY	SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes Amended COC
NOTES: *Primary Analytes as indicated on sample labels **Secondary Analytes as indicated on sample labels \$ Moisture by EPA 180.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected																												
Samplers Signatures:																												
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metal EPA 8010/60208/2471A	*Fluoride EPA 300.0	SVOCS EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*PH EPA 8045C/8040B	Pesticide Confirmation by EPA 8850 (10%)	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	*TPHEPH EPA 8015B Mod.	*Nitrates EPA 300.0	*Formaldehyde EPA 8315A	*n-NDMA EPA 1025C	*Energetics EPA 8330A	*Cyanide EPA 8012B	*Terphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohols EPA 8015B			
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	1-SS sleeve			X	X																			
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	1-SS sleeve			X	X																			
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X												
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-SS sleeve			X	X																			
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	1-SS sleeve			X	X																			
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	1-SS sleeve			X	X																			
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	4-16 oz jar	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	2-SS sleeve			X	X																			
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	1-SS sleeve			X	X																			
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X												
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-SS sleeve			X	X																			
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X												
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-SS sleeve			X	X																			
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	1-SS sleeve			X	X																			
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																						Laboratory:		
		05/23/2011 / 1700																								Lancaster Laboratories, Inc.		
Received by: (Signature)		Date/Time		Airbill No.(s)																								
				8695 1441 7961, 7994, 8008,7972, 7983																								

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns $>25\%$
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is $<CRDL$, but $\geq IDL$
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

June 12, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 05/24/2011

Group Number: 1248219

SDG: DX087

PO Number: 1203-004-008-AL

Release Number: TRACKING #12090

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-084-SA5DN-SB-4.0-5.0 Soil	6296078
SL-089-SA5DN-SB-4.0-5.0 Soil	6296079
SL-081-SA5DN-SB-4.0-5.0 Soil	6296080
SL-081-SA5DN-SB-9.0-10.0 Soil	6296081
SL-075-SA5DN-SB-4.0-5.0 Soil	6296082
SL-075-SA5DN-SB-9.0-10.0 Soil	6296083
SL-015-SA5DN-SS-0.0-0.5 Soil	6296084
SL-016-SA5DN-SS-0.0-0.5 Soil	6296085
SL-017-SA5DN-SS-0.0-0.5 Soil	6296086
SL-019-SA5DN-SS-0.0-0.5 Soil	6296087
SL-021-SA5DN-SS-0.0-0.5 Soil	6296088
SL-022-SA5DN-SS-0.0-0.5 Soil	6296089
SL-022-SA5DN-SS-0.0-0.5MS Soil	6296090
SL-022-SA5DN-SS-0.0-0.5MSD Soil	6296091
SL-023-SA5DN-SS-0.0-0.5 Soil	6296092
SL-052-SA5DN-SS-0.0-0.5 Soil	6296093
SL-053-SA5DN-SS-0.0-0.5 Soil	6296094
DUP05-SA5DN-QC-052311 Soil	6296095
EB05-SA5DN-SS-052311 Water	6296096
SED-035-SIV-SD Sediment	6296097

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program
COPY TO
ELECTRONIC Data Package Group
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296078
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0844 SDG#: DX087-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	9.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296078
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0844 SDG#: DX087-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0287 JQ	0.0197	1.10	1
11031	12378-PeCDD	40321-76-4	0.0421 JBQ	0.0200	5.48	1
11031	123478-HxCDD	39227-28-6	0.0588 JB	0.0196	5.48	1
11031	123678-HxCDD	57653-85-7	0.102 JB	0.0198	5.48	1
11031	123789-HxCDD	19408-74-3	0.0783 JBQ	0.0191	5.48	1
11031	1234678-HpCDD	35822-46-9	1.10 JB	0.0381	5.48	1
11031	OCDD	3268-87-9	15.6 B	0.0404	11.0	1
11031	2378-TCDF	51207-31-9	0.0187 U	0.0187	1.10	1
11031	12378-PeCDF	57117-41-6	0.0433 JBQ	0.0101	5.48	1
11031	23478-PeCDF	57117-31-4	0.0847 JBQ	0.00940	5.48	1
11031	123478-HxCDF	70648-26-9	0.0686 JBQ	0.0175	5.48	1
11031	123678-HxCDF	57117-44-9	0.0586 JBQ	0.0163	5.48	1
11031	123789-HxCDF	72918-21-9	0.0885 JBQ	0.0152	5.48	1
11031	234678-HxCDF	60851-34-5	0.0973 JB	0.0131	5.48	1
11031	1234678-HpCDF	67562-39-4	0.293 JBQ	0.0178	5.48	1
11031	1234789-HpCDF	55673-89-7	0.0709 JBQ	0.0235	5.48	1
11031	OCDF	39001-02-0	0.451 JB	0.0403	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296078
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0844 SDG#: DX087-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296078
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

D0844 SDG#: DX087-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 14:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296079
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0894 SDG#: DX087-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	9.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296079
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0894 SDG#: DX087-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0257 U	0.0257	1.10	1
11031	12378-PeCDD	40321-76-4	0.0221 JBQ	0.0207	5.48	1
11031	123478-HxCDD	39227-28-6	0.0244 JBQ	0.0187	5.48	1
11031	123678-HxCDD	57653-85-7	0.0757 JBQ	0.0197	5.48	1
11031	123789-HxCDD	19408-74-3	0.0955 JBQ	0.0178	5.48	1
11031	1234678-HpCDD	35822-46-9	0.786 JB	0.0366	5.48	1
11031	OCDD	3268-87-9	13.5 B	0.0348	11.0	1
11031	2378-TCDF	51207-31-9	0.0211 U	0.0211	1.10	1
11031	12378-PeCDF	57117-41-6	0.0481 JBQ	0.0121	5.48	1
11031	23478-PeCDF	57117-31-4	0.0880 JB	0.0111	5.48	1
11031	123478-HxCDF	70648-26-9	0.0739 JBQ	0.0154	5.48	1
11031	123678-HxCDF	57117-44-9	0.0602 JBQ	0.0144	5.48	1
11031	123789-HxCDF	72918-21-9	0.0669 JB	0.0168	5.48	1
11031	234678-HxCDF	60851-34-5	0.0685 JBQ	0.0131	5.48	1
11031	1234678-HpCDF	67562-39-4	0.221 JBQ	0.0132	5.48	1
11031	1234789-HpCDF	55673-89-7	0.0785 JB	0.0171	5.48	1
11031	OCDF	39001-02-0	0.330 JBQ	0.0343	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	68	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296079
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

D0894 SDG#: DX087-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296079
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

D0894 SDG#: DX087-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 15:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296080
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0814 SDG#: DX087-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	9.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296080
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0814 SDG#: DX087-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0264 U	0.0264	1.10	1
11031	12378-PeCDD	40321-76-4	0.0630 JBQ	0.0209	5.51	1
11031	123478-HxCDD	39227-28-6	0.0225 JBQ	0.0209	5.51	1
11031	123678-HxCDD	57653-85-7	0.0756 JBQ	0.0219	5.51	1
11031	123789-HxCDD	19408-74-3	0.134 JBQ	0.0206	5.51	1
11031	1234678-HpCDD	35822-46-9	0.678 JB	0.0383	5.51	1
11031	OCDD	3268-87-9	5.37 JB	0.0434	11.0	1
11031	2378-TCDF	51207-31-9	0.0222 U	0.0222	1.10	1
11031	12378-PeCDF	57117-41-6	0.0541 JBQ	0.0122	5.51	1
11031	23478-PeCDF	57117-31-4	0.0941 JB	0.0114	5.51	1
11031	123478-HxCDF	70648-26-9	0.0476 JBQ	0.0161	5.51	1
11031	123678-HxCDF	57117-44-9	0.0376 JB	0.0154	5.51	1
11031	123789-HxCDF	72918-21-9	0.121 JB	0.0166	5.51	1
11031	234678-HxCDF	60851-34-5	0.0856 JB	0.0141	5.51	1
11031	1234678-HpCDF	67562-39-4	0.211 JB	0.0143	5.51	1
11031	1234789-HpCDF	55673-89-7	0.0778 JB	0.0180	5.51	1
11031	OCDF	39001-02-0	0.341 JBQ	0.0373	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	63	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	65	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296080
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0814 SDG#: DX087-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296080
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0814 SDG#: DX087-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 16:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296081
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0819 SDG#: DX087-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	8.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296081
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0819 SDG#: DX087-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0346 JQ	0.0205	1.09	1
11031	12378-PeCDD	40321-76-4	0.0393 JBQ	0.0226	5.44	1
11031	123478-HxCDD	39227-28-6	0.0584 JBQ	0.0176	5.44	1
11031	123678-HxCDD	57653-85-7	0.0621 JBQ	0.0183	5.44	1
11031	123789-HxCDD	19408-74-3	0.0992 JB	0.0178	5.44	1
11031	1234678-HpCDD	35822-46-9	0.860 JB	0.0380	5.44	1
11031	OCDD	3268-87-9	8.17 JB	0.0400	10.9	1
11031	2378-TCDF	51207-31-9	0.0196 U	0.0196	1.09	1
11031	12378-PeCDF	57117-41-6	0.0391 JBQ	0.0103	5.44	1
11031	23478-PeCDF	57117-31-4	0.0836 JBQ	0.00973	5.44	1
11031	123478-HxCDF	70648-26-9	0.0690 JB	0.0143	5.44	1
11031	123678-HxCDF	57117-44-9	0.0474 JBQ	0.0139	5.44	1
11031	123789-HxCDF	72918-21-9	0.0578 JBQ	0.0156	5.44	1
11031	234678-HxCDF	60851-34-5	0.0702 JB	0.0137	5.44	1
11031	1234678-HpCDF	67562-39-4	0.253 JB	0.0133	5.44	1
11031	1234789-HpCDF	55673-89-7	0.0811 JBQ	0.0175	5.44	1
11031	OCDF	39001-02-0	0.330 JB	0.0341	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration



Analysis Report

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Page 3 of 4

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296081
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0819 SDG#: DX087-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296081
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0819 SDG#: DX087-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 17:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296082
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0754 SDG#: DX087-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	13.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296082
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0754 SDG#: DX087-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0208 U	0.0208	1.11	1
11031	12378-PeCDD	40321-76-4	0.0231 U	0.0231	5.53	1
11031	123478-HxCDD	39227-28-6	0.0180 U	0.0180	5.53	1
11031	123678-HxCDD	57653-85-7	0.0634 JBQ	0.0187	5.53	1
11031	123789-HxCDD	19408-74-3	0.0804 JBQ	0.0162	5.53	1
11031	1234678-HpCDD	35822-46-9	0.425 JBQ	0.0299	5.53	1
11031	OCDD	3268-87-9	3.62 JB	0.0385	11.1	1
11031	2378-TCDF	51207-31-9	0.0188 U	0.0188	1.11	1
11031	12378-PeCDF	57117-41-6	0.0336 JBQ	0.0105	5.53	1
11031	23478-PeCDF	57117-31-4	0.0655 JBQ	0.00993	5.53	1
11031	123478-HxCDF	70648-26-9	0.0789 JB	0.0232	5.53	1
11031	123678-HxCDF	57117-44-9	0.0612 JB	0.0197	5.53	1
11031	123789-HxCDF	72918-21-9	0.0488 JB	0.0144	5.53	1
11031	234678-HxCDF	60851-34-5	0.0790 JB	0.0119	5.53	1
11031	1234678-HpCDF	67562-39-4	0.246 JBQ	0.0188	5.53	1
11031	1234789-HpCDF	55673-89-7	0.0287 JB	0.0195	5.53	1
11031	OCDF	39001-02-0	0.184 JB	0.0335	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	63	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	36	26 - 152
13C12-123678-HxCDF	41	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	50	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296082
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0754 SDG#: DX087-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296082
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

D0754 SDG#: DX087-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 18:31	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1



Analysis Report

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Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296083
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0759 SDG#: DX087-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	13.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296083
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0759 SDG#: DX087-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0743 JQ	0.0207	1.14	1
11031	12378-PeCDD	40321-76-4	0.200 JB	0.0241	5.68	1
11031	123478-HxCDD	39227-28-6	0.160 JB	0.0242	5.68	1
11031	123678-HxCDD	57653-85-7	0.186 JBQ	0.0255	5.68	1
11031	123789-HxCDD	19408-74-3	0.173 JBQ	0.0227	5.68	1
11031	1234678-HpCDD	35822-46-9	1.22 JBQ	0.0413	5.68	1
11031	OCDD	3268-87-9	13.4 B	0.0406	11.4	1
11031	2378-TCDF	51207-31-9	0.0745 JBQ	0.0183	1.14	1
11031	12378-PeCDF	57117-41-6	0.255 JBQ	0.0128	5.68	1
11031	23478-PeCDF	57117-31-4	0.247 JBQ	0.0115	5.68	1
11031	123478-HxCDF	70648-26-9	0.219 JB	0.0252	5.68	1
11031	123678-HxCDF	57117-44-9	0.219 JB	0.0226	5.68	1
11031	123789-HxCDF	72918-21-9	0.174 JBQ	0.0219	5.68	1
11031	234678-HxCDF	60851-34-5	0.185 JBQ	0.0188	5.68	1
11031	1234678-HpCDF	67562-39-4	0.399 JB	0.0235	5.68	1
11031	1234789-HpCDF	55673-89-7	0.0908 JBQ	0.0274	5.68	1
11031	OCDF	39001-02-0	0.545 JBQ	0.0399	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	56	25 - 181
13C12-123478-HxCDD	54	32 - 141
13C12-123678-HxCDD	53	28 - 130
13C12-123789-HxCDD	57	28 - 130
13C12-1234678-HpCDD	57	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	55	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	42	26 - 152
13C12-123678-HxCDF	45	26 - 123
13C12-234678-HxCDF	56	28 - 136
13C12-123789-HxCDF	57	29 - 147
13C12-1234678-HpCDF	48	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	44	17 - 157
13C12-1278-TCDD (CRS)	60	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration



Analysis Report

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Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296083
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0759 SDG#: DX087-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296083
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

D0759 SDG#: DX087-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 19:27	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296084
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD015 SDG#: DX087-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	12.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296084
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD015 SDG#: DX087-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.109 J	0.0215	1.11	1
11031	12378-PeCDD	40321-76-4	0.760 JBQ	0.0496	5.54	1
11031	123478-HxCDD	39227-28-6	2.39 JB	0.104	5.54	1
11031	123678-HxCDD	57653-85-7	14.6 B	0.110	5.54	1
11031	123789-HxCDD	19408-74-3	5.38 JB	0.102	5.54	1
11031	1234678-HpCDD	35822-46-9	709 B	0.414	5.54	1
11031	OCDD	3268-87-9	13,100 EB	0.317	11.1	1
11031	2378-TCDF	51207-31-9	0.340 JB	0.0843	1.11	1
11031	12378-PeCDF	57117-41-6	0.823 JBQ	0.0435	5.54	1
11031	23478-PeCDF	57117-31-4	0.717 JB	0.0422	5.54	1
11031	123478-HxCDF	70648-26-9	2.12 JB	0.101	5.54	1
11031	123678-HxCDF	57117-44-9	0.723 JB	0.0904	5.54	1
11031	123789-HxCDF	72918-21-9	0.659 JB	0.0804	5.54	1
11031	234678-HxCDF	60851-34-5	0.799 JB	0.0713	5.54	1
11031	1234678-HpCDF	67562-39-4	26.0 B	0.0823	5.54	1
11031	1234789-HpCDF	55673-89-7	2.06 JB	0.0973	5.54	1
11031	OCDF	39001-02-0	71.5 B	0.0670	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	52	26 - 152
13C12-123678-HxCDF	56	26 - 123
13C12-234678-HxCDF	71	28 - 136

*=This limit was used in the evaluation of the final result

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296084
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD015 SDG#: DX087-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-123789-HxCDF	74	29 - 147			
	13C12-1234678-HpCDF	61	28 - 143			
	13C12-1234789-HpCDF	66	26 - 138			
	13C12-OCDF	61	17 - 157			
	13C12-1278-TCDD (CRS)	78	35 - 197			

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal



Analysis Report

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Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296084
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD015 SDG#: DX087-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 20:24	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296085
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD016 SDG#: DX087-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	11.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296085
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD016 SDG#: DX087-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0564	JQ	0.0183	1
11031	12378-PeCDD	40321-76-4	0.249	JB	0.0519	1
11031	123478-HxCDD	39227-28-6	0.518	JB	0.0675	1
11031	123678-HxCDD	57653-85-7	2.51	JB	0.0728	1
11031	123789-HxCDD	19408-74-3	1.28	JB	0.0685	1
11031	1234678-HpCDD	35822-46-9	110	B	0.143	1
11031	OCDD	3268-87-9	1,930	B	0.129	1
11031	2378-TCDF	51207-31-9	1.09	B	0.151	1
11031	12378-PeCDF	57117-41-6	4.39	JB	0.0886	1
11031	23478-PeCDF	57117-31-4	1.18	JB	0.0823	1
11031	123478-HxCDF	70648-26-9	7.94	B	0.0771	1
11031	123678-HxCDF	57117-44-9	0.791	JB	0.0746	1
11031	123789-HxCDF	72918-21-9	0.442	JB	0.0784	1
11031	234678-HxCDF	60851-34-5	0.465	JBQ	0.0713	1
11031	1234678-HpCDF	67562-39-4	4.92	JB	0.0432	1
11031	1234789-HpCDF	55673-89-7	0.508	JB	0.0552	1
11031	OCDF	39001-02-0	12.7	B	0.0458	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296085
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.

Submitted: 05/24/2011 09:40

14420 Albemarle Point Place

Reported: 06/12/2011 18:19

Suite 210

Chantilly VA 20151

SD016 SDG#: DX087-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296085
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

SD016 SDG#: DX087-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 21:20	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296086
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD017 SDG#: DX087-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	10.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296086
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD017 SDG#: DX087-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0612 JQ	0.0199	1.10	1
11031	12378-PeCDD	40321-76-4	0.438 JBQ	0.0700	5.49	1
11031	123478-HxCDD	39227-28-6	0.175 JB	0.0546	5.49	1
11031	123678-HxCDD	57653-85-7	0.543 JB	0.0571	5.49	1
11031	123789-HxCDD	19408-74-3	0.639 JB	0.0557	5.49	1
11031	1234678-HpCDD	35822-46-9	10.3 B	0.0473	5.49	1
11031	OCDD	3268-87-9	126 B	0.0498	11.0	1
11031	2378-TCDF	51207-31-9	2.09 B	0.189	1.10	1
11650	2378-TCDF-Conf	51207-31-9	0.964 JB	0.0562	1.10	1
11031	12378-PeCDF	57117-41-6	5.65 B	0.107	5.49	1
11031	23478-PeCDF	57117-31-4	2.28 JB	0.0990	5.49	1
11031	123478-HxCDF	70648-26-9	18.5 B	0.0888	5.49	1
11031	123678-HxCDF	57117-44-9	0.948 JB	0.0862	5.49	1
11031	123789-HxCDF	72918-21-9	0.582 JB	0.0969	5.49	1
11031	234678-HxCDF	60851-34-5	0.693 JB	0.0842	5.49	1
11031	1234678-HpCDF	67562-39-4	2.11 JB	0.0277	5.49	1
11031	1234789-HpCDF	55673-89-7	0.342 JB	0.0361	5.49	1
11031	OCDF	39001-02-0	4.42 JB	0.0381	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-2378-TCDF-Conf	77	24 - 169
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	66	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296086
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD017 SDG#: DX087-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					



Analysis Report

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Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296086
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD017 SDG#: DX087-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 01:20	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11155001	06/09/2011 17:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296087
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD019 SDG#: DX087-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	13.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296087
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD019 SDG#: DX087-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0320 JQ	0.0173	1.14	1
11031	12378-PeCDD	40321-76-4	0.118 JBQ	0.0278	5.70	1
11031	123478-HxCDD	39227-28-6	0.182 JBQ	0.0543	5.70	1
11031	123678-HxCDD	57653-85-7	0.896 JB	0.0565	5.70	1
11031	123789-HxCDD	19408-74-3	0.693 JB	0.0555	5.70	1
11031	1234678-HpCDD	35822-46-9	27.7 B	0.0813	5.70	1
11031	OCDD	3268-87-9	426 B	0.0829	11.4	1
11031	2378-TCDF	51207-31-9	0.141 JB	0.0524	1.14	1
11031	12378-PeCDF	57117-41-6	0.342 JB	0.0280	5.70	1
11031	23478-PeCDF	57117-31-4	0.224 JB	0.0280	5.70	1
11031	123478-HxCDF	70648-26-9	0.779 JB	0.0443	5.70	1
11031	123678-HxCDF	57117-44-9	0.134 JB	0.0412	5.70	1
11031	123789-HxCDF	72918-21-9	0.474 JB	0.0473	5.70	1
11031	234678-HxCDF	60851-34-5	0.169 JBQ	0.0399	5.70	1
11031	1234678-HpCDF	67562-39-4	1.60 JB	0.0290	5.70	1
11031	1234789-HpCDF	55673-89-7	0.180 JBQ	0.0370	5.70	1
11031	OCDF	39001-02-0	4.52 JB	0.0404	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration



Analysis Report

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296087
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD019 SDG#: DX087-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296087
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

SD019 SDG#: DX087-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 02:16	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296088
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD021 SDG#: DX087-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	14.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296088
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD021 SDG#: DX087-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0317	JQ 0.0182	1.13	1
11031	12378-PeCDD	40321-76-4	0.266	JBQ 0.0348	5.67	1
11031	123478-HxCDD	39227-28-6	1.45	JB 0.0837	5.67	1
11031	123678-HxCDD	57653-85-7	10.3	B 0.0895	5.67	1
11031	123789-HxCDD	19408-74-3	3.84	JB 0.0866	5.67	1
11031	1234678-HpCDD	35822-46-9	535	B 0.278	5.67	1
11031	OCDD	3268-87-9	9,760	EB 0.177	11.3	1
11031	2378-TCDF	51207-31-9	0.320	JB 0.108	1.13	1
11031	12378-PeCDF	57117-41-6	0.660	JB 0.0329	5.67	1
11031	23478-PeCDF	57117-31-4	0.241	JBQ 0.0311	5.67	1
11031	123478-HxCDF	70648-26-9	0.612	JB 0.0487	5.67	1
11031	123678-HxCDF	57117-44-9	0.297	JB 0.0477	5.67	1
11031	123789-HxCDF	72918-21-9	0.348	JB 0.0581	5.67	1
11031	234678-HxCDF	60851-34-5	0.449	JB 0.0497	5.67	1
11031	1234678-HpCDF	67562-39-4	19.1	B 0.0605	5.67	1
11031	1234789-HpCDF	55673-89-7	1.56	JB 0.0871	5.67	1
11031	OCDF	39001-02-0	53.2	B 0.0546	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296088
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD021 SDG#: DX087-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296088
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD021 SDG#: DX087-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 03:13	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296089
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD022 SDG#: DX087-12BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296089
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD022 SDG#: DX087-12BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0446 JQ	0.0180	1.13	1
11031	12378-PeCDD	40321-76-4	0.285 JBQ	0.0365	5.65	1
11031	123478-HxCDD	39227-28-6	0.625 JB	0.0703	5.65	1
11031	123678-HxCDD	57653-85-7	1.99 JB	0.0739	5.65	1
11031	123789-HxCDD	19408-74-3	1.42 JB	0.0695	5.65	1
11031	1234678-HpCDD	35822-46-9	81.1 B	0.0907	5.65	1
11031	OCDD	3268-87-9	786 B	0.103	11.3	1
11031	2378-TCDF	51207-31-9	0.246 JB	0.0758	1.13	1
11031	12378-PeCDF	57117-41-6	0.673 JB	0.0349	5.65	1
11031	23478-PeCDF	57117-31-4	0.641 JB	0.0343	5.65	1
11031	123478-HxCDF	70648-26-9	0.673 JB	0.0416	5.65	1
11031	123678-HxCDF	57117-44-9	0.398 JB	0.0403	5.65	1
11031	123789-HxCDF	72918-21-9	0.598 JB	0.0454	5.65	1
11031	234678-HxCDF	60851-34-5	0.420 JB	0.0398	5.65	1
11031	1234678-HpCDF	67562-39-4	5.13 JB	0.0284	5.65	1
11031	1234789-HpCDF	55673-89-7	0.419 JB	0.0358	5.65	1
11031	OCDF	39001-02-0	15.0 B	0.0363	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	66	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296089
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD022 SDG#: DX087-12BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296089
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

SD022 SDG#: DX087-12BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 04:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296090
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD022 SDG#: DX087-12MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296090
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD022 SDG#: DX087-12MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.7	0.0294	1.15	1
11031	12378-PeCDD	40321-76-4	122 B	0.0467	5.74	1
11031	123478-HxCDD	39227-28-6	123 B	0.0767	5.74	1
11031	123678-HxCDD	57653-85-7	124 B	0.0803	5.74	1
11031	123789-HxCDD	19408-74-3	122 B	0.0780	5.74	1
11031	1234678-HpCDD	35822-46-9	175 B	0.130	5.74	1
11031	OCDD	3268-87-9	787 B	0.103	11.5	1
11031	2378-TCDF	51207-31-9	25.3 B	0.0819	1.15	1
11031	12378-PeCDF	57117-41-6	121 B	0.0466	5.74	1
11031	23478-PeCDF	57117-31-4	121 B	0.0442	5.74	1
11031	123478-HxCDF	70648-26-9	123 B	0.0971	5.74	1
11031	123678-HxCDF	57117-44-9	121 B	0.0917	5.74	1
11031	123789-HxCDF	72918-21-9	122 B	0.110	5.74	1
11031	234678-HxCDF	60851-34-5	122 B	0.0923	5.74	1
11031	1234678-HpCDF	67562-39-4	124 B	0.0610	5.74	1
11031	1234789-HpCDF	55673-89-7	119 B	0.0827	5.74	1
11031	OCDF	39001-02-0	250 B	0.0644	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	64	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	63	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration



Analysis Report

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Page 3 of 4

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296090
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD022 SDG#: DX087-12MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 4 of 4

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296090
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD022 SDG#: DX087-12MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 14:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296091
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD022 SDG#: DX087-12MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296091
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD022 SDG#: DX087-12MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.0	0.0279	1.13	1
11031	12378-PeCDD	40321-76-4	121	B 0.0567	5.65	1
11031	123478-HxCDD	39227-28-6	120	B 0.0775	5.65	1
11031	123678-HxCDD	57653-85-7	121	B 0.0820	5.65	1
11031	123789-HxCDD	19408-74-3	120	B 0.0769	5.65	1
11031	1234678-HpCDD	35822-46-9	198	B 0.103	5.65	1
11031	OCDD	3268-87-9	1,150	B 0.122	11.3	1
11031	2378-TCDF	51207-31-9	24.8	B 0.0758	1.13	1
11031	12378-PeCDF	57117-41-6	120	B 0.0419	5.65	1
11031	23478-PeCDF	57117-31-4	118	B 0.0370	5.65	1
11031	123478-HxCDF	70648-26-9	122	B 0.0621	5.65	1
11031	123678-HxCDF	57117-44-9	120	B 0.0595	5.65	1
11031	123789-HxCDF	72918-21-9	119	B 0.0618	5.65	1
11031	234678-HxCDF	60851-34-5	121	B 0.0544	5.65	1
11031	1234678-HpCDF	67562-39-4	123	B 0.0536	5.65	1
11031	1234789-HpCDF	55673-89-7	118	B 0.0630	5.65	1
11031	OCDF	39001-02-0	251	B 0.0486	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	65	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296091
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD022 SDG#: DX087-12MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296091
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

SD022 SDG#: DX087-12MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 06:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296092
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD023 SDG#: DX087-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	12.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296092
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD023 SDG#: DX087-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0243 JQ	0.0169	1.11	1
11031	12378-PeCDD	40321-76-4	0.234 JBQ	0.0260	5.57	1
11031	123478-HxCDD	39227-28-6	0.329 JB	0.0599	5.57	1
11031	123678-HxCDD	57653-85-7	1.40 JB	0.0628	5.57	1
11031	123789-HxCDD	19408-74-3	0.891 JB	0.0592	5.57	1
11031	1234678-HpCDD	35822-46-9	73.4 B	0.103	5.57	1
11031	OCDD	3268-87-9	911 B	0.102	11.1	1
11031	2378-TCDF	51207-31-9	0.0866 U	0.0866	1.11	1
11031	12378-PeCDF	57117-41-6	0.498 JB	0.0304	5.57	1
11031	23478-PeCDF	57117-31-4	0.251 JB	0.0288	5.57	1
11031	123478-HxCDF	70648-26-9	0.421 JB	0.0366	5.57	1
11031	123678-HxCDF	57117-44-9	0.218 JB	0.0342	5.57	1
11031	123789-HxCDF	72918-21-9	0.456 JB	0.0444	5.57	1
11031	234678-HxCDF	60851-34-5	0.239 JB	0.0356	5.57	1
11031	1234678-HpCDF	67562-39-4	3.03 JB	0.0304	5.57	1
11031	1234789-HpCDF	55673-89-7	0.391 JB	0.0449	5.57	1
11031	OCDF	39001-02-0	8.57 JB	0.0439	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	61	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration



Analysis Report

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Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296092
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD023 SDG#: DX087-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 4 of 4

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296092
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD023 SDG#: DX087-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 06:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296093
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD052 SDG#: DX087-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	13.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296093
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD052 SDG#: DX087-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0169 U	0.0169	1.15	1
11031	12378-PeCDD	40321-76-4	0.205 JBQ	0.0260	5.76	1
11031	123478-HxCDD	39227-28-6	0.153 JBQ	0.0449	5.76	1
11031	123678-HxCDD	57653-85-7	0.481 JB	0.0474	5.76	1
11031	123789-HxCDD	19408-74-3	0.555 JB	0.0445	5.76	1
11031	1234678-HpCDD	35822-46-9	9.90 B	0.0525	5.76	1
11031	OCDD	3268-87-9	115 B	0.0571	11.5	1
11031	2378-TCDF	51207-31-9	0.122 JB	0.0261	1.15	1
11031	12378-PeCDF	57117-41-6	0.215 JB	0.0158	5.76	1
11031	23478-PeCDF	57117-31-4	0.185 JBQ	0.0153	5.76	1
11031	123478-HxCDF	70648-26-9	0.366 JB	0.0297	5.76	1
11031	123678-HxCDF	57117-44-9	0.146 JBQ	0.0277	5.76	1
11031	123789-HxCDF	72918-21-9	0.552 JB	0.0290	5.76	1
11031	234678-HxCDF	60851-34-5	0.161 JB	0.0243	5.76	1
11031	1234678-HpCDF	67562-39-4	0.773 JB	0.0267	5.76	1
11031	1234789-HpCDF	55673-89-7	0.129 JBQ	0.0355	5.76	1
11031	OCDF	39001-02-0	1.47 JB	0.0553	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	59	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	60	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	49	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296093
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD052 SDG#: DX087-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296093
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

SD052 SDG#: DX087-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 07:55	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296094
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD053 SDG#: DX087-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	Moisture Content by 160.3	n.a.	11.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296094
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SD053 SDG#: DX087-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.130 JQ	0.0181	1.12	1
11031	12378-PeCDD	40321-76-4	0.440 JB	0.0425	5.58	1
11031	123478-HxCDD	39227-28-6	0.379 JB	0.0660	5.58	1
11031	123678-HxCDD	57653-85-7	1.60 JB	0.0689	5.58	1
11031	123789-HxCDD	19408-74-3	1.79 JB	0.0645	5.58	1
11031	1234678-HpCDD	35822-46-9	27.4 B	0.0755	5.58	1
11031	OCDD	3268-87-9	358 B	0.0963	11.2	1
11031	2378-TCDF	51207-31-9	0.404 JB	0.0778	1.12	1
11031	12378-PeCDF	57117-41-6	0.870 JB	0.0363	5.58	1
11031	23478-PeCDF	57117-31-4	0.613 JBQ	0.0342	5.58	1
11031	123478-HxCDF	70648-26-9	0.623 JB	0.0463	5.58	1
11031	123678-HxCDF	57117-44-9	0.422 JB	0.0443	5.58	1
11031	123789-HxCDF	72918-21-9	1.63 JB	0.0512	5.58	1
11031	234678-HxCDF	60851-34-5	0.322 JB	0.0424	5.58	1
11031	1234678-HpCDF	67562-39-4	2.38 JB	0.0282	5.58	1
11031	1234789-HpCDF	55673-89-7	0.280 JB	0.0378	5.58	1
11031	OCDF	39001-02-0	5.12 JB	0.0491	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	84	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	93	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296094
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

SD053 SDG#: DX087-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296094
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 06/12/2011 18:19

Chantilly VA 20151

SD053 SDG#: DX087-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 08:52	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296095
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

DDP05 SDG#: DX087-16FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	13.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296095
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

DDP05 SDG#: DX087-16FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0422 JQ	0.0212	1.12	1
11031	12378-PeCDD	40321-76-4	0.284 JBQ	0.0425	5.61	1
11031	123478-HxCDD	39227-28-6	0.416 JB	0.0902	5.61	1
11031	123678-HxCDD	57653-85-7	1.82 JB	0.0956	5.61	1
11031	123789-HxCDD	19408-74-3	1.22 JBQ	0.0915	5.61	1
11031	1234678-HpCDD	35822-46-9	73.8 B	0.121	5.61	1
11031	OCDD	3268-87-9	782 B	0.176	11.2	1
11031	2378-TCDF	51207-31-9	0.0788 U	0.0788	1.12	1
11031	12378-PeCDF	57117-41-6	0.676 JB	0.0402	5.61	1
11031	23478-PeCDF	57117-31-4	0.880 JB	0.0383	5.61	1
11031	123478-HxCDF	70648-26-9	0.581 JB	0.0503	5.61	1
11031	123678-HxCDF	57117-44-9	0.371 JB	0.0465	5.61	1
11031	123789-HxCDF	72918-21-9	0.613 JBQ	0.0533	5.61	1
11031	234678-HxCDF	60851-34-5	0.372 JB	0.0468	5.61	1
11031	1234678-HpCDF	67562-39-4	4.16 JB	0.0354	5.61	1
11031	1234789-HpCDF	55673-89-7	0.317 JBQ	0.0466	5.61	1
11031	OCDF	39001-02-0	13.0 B	0.0565	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	66	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	74	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296095
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.

Submitted: 05/24/2011 09:40

14420 Albemarle Point Place

Reported: 06/12/2011 18:19

Suite 210

Chantilly VA 20151

DDP05 SDG#: DX087-16FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					



Analysis Report

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Page 4 of 4

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296095
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

DDP05 SDG#: DX087-16FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 09:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 2

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296096
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

DEB05 SDG#: DX087-17EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.19 JQ	0.341	1.96	1
10915	12378-PeCDD	40321-76-4	0.774 JB	0.377	9.78	1
10915	123478-HxCDD	39227-28-6	2.29 JB	0.285	9.78	1
10915	123678-HxCDD	57653-85-7	2.08 JB	0.299	9.78	1
10915	123789-HxCDD	19408-74-3	3.86 JBQ	0.301	9.78	1
10915	1234678-HpCDD	35822-46-9	6.16 JBQ	0.356	9.78	1
10915	OCDD	3268-87-9	15.0 JB	0.433	19.6	1
10915	2378-TCDF	51207-31-9	1.14 JBQ	0.281	1.96	1
10915	12378-PeCDF	57117-41-6	1.55 JB	0.200	9.78	1
10915	23478-PeCDF	57117-31-4	2.21 JBQ	0.185	9.78	1
10915	123478-HxCDF	70648-26-9	1.93 JB	0.243	9.78	1
10915	123678-HxCDF	57117-44-9	1.16 JBQ	0.236	9.78	1
10915	123789-HxCDF	72918-21-9	1.79 JBQ	0.240	9.78	1
10915	234678-HxCDF	60851-34-5	3.36 JB	0.214	9.78	1
10915	1234678-HpCDF	67562-39-4	4.83 JBQ	0.267	9.78	1
10915	1234789-HpCDF	55673-89-7	3.65 JB	0.305	9.78	1
10915	OCDF	39001-02-0	6.45 JBQ	0.454	19.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	68	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 2 of 2

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296096
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

DEB05 SDG#: DX087-17EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11147001	06/02/2011 05:56	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	11147001	05/27/2011 08:00	Deborah M Zimmerman	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Page 1 of 4

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296097
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SDD35 SDG#: DX087-18*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	Moisture Content by 160.3	n.a.	13.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296097
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SDD35 SDG#: DX087-18*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.146 J	0.0236	1.13	1
11031	12378-PeCDD	40321-76-4	0.611 JB	0.0615	5.67	1
11031	123478-HxCDD	39227-28-6	0.914 JB	0.0955	5.67	1
11031	123678-HxCDD	57653-85-7	2.43 JB	0.0994	5.67	1
11031	123789-HxCDD	19408-74-3	1.88 JB	0.0956	5.67	1
11031	1234678-HpCDD	35822-46-9	63.7 B	0.104	5.67	1
11031	OCDD	3268-87-9	646 B	0.0791	11.3	1
11031	2378-TCDF	51207-31-9	2.04 B	0.0839	1.13	1
11650	2378-TCDF-Conf	51207-31-9	1.95 B	0.0479	1.13	1
11031	12378-PeCDF	57117-41-6	0.513 JB	0.0252	5.67	1
11031	23478-PeCDF	57117-31-4	0.671 JB	0.0244	5.67	1
11031	123478-HxCDF	70648-26-9	0.682 JB	0.0481	5.67	1
11031	123678-HxCDF	57117-44-9	0.515 JB	0.0471	5.67	1
11031	123789-HxCDF	72918-21-9	0.343 JB	0.0484	5.67	1
11031	234678-HxCDF	60851-34-5	0.687 JB	0.0433	5.67	1
11031	1234678-HpCDF	67562-39-4	8.42 B	0.0462	5.67	1
11031	1234789-HpCDF	55673-89-7	0.823 JBQ	0.0590	5.67	1
11031	OCDF	39001-02-0	21.0 B	0.0429	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-2378-TCDF-Conf	67	24 - 169
13C12-12378-PeCDD	61	25 - 181
13C12-123478-HxCDD	63	32 - 141
13C12-123678-HxCDD	60	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	60	23 - 140
13C12-OCDD	53	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	62	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	57	26 - 123
13C12-234678-HxCDF	62	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	58	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	45	17 - 157
13C12-1278-TCDD (CRS)	70	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column



Analysis Report

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Page 3 of 4

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296097
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SDD35 SDG#: DX087-18*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

*=This limit was used in the evaluation of the final result

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296097
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 06/12/2011 18:19

SDD35 SDG#: DX087-18*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 13:48	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11155001	06/09/2011 18:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/12/11 at 06:19 PM

Group Number: 1248219

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11153162401B Moisture Content by 160.3	Sample number(s): 6296082-6296083, 6296086, 6296093-6296094, 6296097 100 80-120								
Batch number: 11160162402A Moisture Content by 160.3	Sample number(s): 6296078-6296081, 6296084-6296085, 6296087-6296091 100 80-120								
Batch number: 11160162402B Moisture Content by 160.3	Sample number(s): 6296092, 6296095 100 80-120								

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11147001	Sample number(s): 6296096								
2378-TCDD	0.409 U	0.409	2.00	pg/l	98		67-158		
12378-PeCDD	1.10 J	0.462	10.0	pg/l	99		70-142		
123478-HxCDD	1.05 J	0.375	10.0	pg/l	97		70-164		
123678-HxCDD	1.65 J	0.380	10.0	pg/l	98		76-134		
123789-HxCDD	1.92 J	0.379	10.0	pg/l	99		64-162		
1234678-HpCDD	5.92 J	0.571	10.0	pg/l	95		70-140		
OCDD	18.2 J	0.525	20.0	pg/l	95		78-144		
2378-TCDF	0.454 J	0.375	2.00	pg/l	102		75-158		
12378-PeCDF	1.09 J	0.272	10.0	pg/l	100		80-134		
23478-PeCDF	1.91 J	0.241	10.0	pg/l	100		68-160		
123478-HxCDF	1.89 J	0.286	10.0	pg/l	99		72-134		
123678-HxCDF	1.45 J	0.277	10.0	pg/l	97		84-130		
123789-HxCDF	1.58 J	0.314	10.0	pg/l	98		78-130		
234678-HxCDF	1.60 J	0.255	10.0	pg/l	97		70-156		
1234678-HpCDF	4.23 J	0.236	10.0	pg/l	94		82-122		
1234789-HpCDF	1.72 J	0.324	10.0	pg/l	99		78-138		
OCDF	6.41 J	0.629	20.0	pg/l	96		63-170		
Batch number: 11155001	Sample number(s): 6296078-6296095, 6296097								
2378-TCDD	0.0253 U	0.0253	1.00	ng/kg	102		67-158		
12378-PeCDD	0.0548 J	0.0216	5.00	ng/kg	107		70-142		
123478-HxCDD	0.0444 J	0.0190	5.00	ng/kg	106		70-164		
123678-HxCDD	0.0613 J	0.0196	5.00	ng/kg	106		76-134		
123789-HxCDD	0.106 J	0.0186	5.00	ng/kg	104		64-162		
1234678-HpCDD	0.294 J	0.0267	5.00	ng/kg	104		70-140		
OCDD	0.764 J	0.0310	10.0	ng/kg	104		78-144		
2378-TCDF	0.0258 J	0.0226	1.00	ng/kg	111		75-158		
2378-TCDF-Conf	0.0331 J	0.0235	1.00	ng/kg					
12378-PeCDF	0.0626 J	0.0117	5.00	ng/kg	106		80-134		
23478-PeCDF	0.0908 J	0.0107	5.00	ng/kg	104		68-160		
123478-HxCDF	0.0897 J	0.0161	5.00	ng/kg	107		72-134		
123678-HxCDF	0.0995 J	0.0147	5.00	ng/kg	105		84-130		
123789-HxCDF	0.145 J	0.0182	5.00	ng/kg	106		78-130		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/12/11 at 06:19 PM

Group Number: 1248219

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
234678-HxCDF	0.0869 J	0.0149	5.00	ng/kg	108		70-156		
1234678-HpCDF	0.229 J	0.0127	5.00	ng/kg	106		82-122		
1234789-HpCDF	0.103 J	0.0179	5.00	ng/kg	106		78-138		
OCDF	0.318 J	0.0347	10.0	ng/kg	107		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11153162401B Moisture Content by 160.3	Sample number(s): 6296082-6296083, 6296086, 6296093-6296094, 6296097 BKG: P296040 13.1 13.8 6 20								
Batch number: 11160162402A Moisture Content by 160.3	Sample number(s): 6296078-6296081, 6296084-6296085, 6296087-6296091 BKG: P296047 12.9 12.9 0 20								
Batch number: 11160162402B Moisture Content by 160.3	Sample number(s): 6296092, 6296095 BKG: P301476 9.5 9.8 2 20								
Batch number: 11155001	Sample number(s): 6296078-6296095, 6296097 UNSPK: 6296089								
2378-TCDD	103	102	67-158	3	25				
12378-PeCDD	106	107	70-142	1	25				
123478-HxCDD	106	106	70-164	2	25				
123678-HxCDD	106	105	76-134	2	25				
123789-HxCDD	105	105	64-162	2	25				
1234678-HpCDD	82	103	70-140	12	25				
OCDD	1*	162*	78-144	37*	25				
2378-TCDF	109	109	75-158	2	25				
12378-PeCDF	105	105	80-134	1	25				
23478-PeCDF	105	104	68-160	3	25				
123478-HxCDF	107	107	72-134	1	25				
123678-HxCDF	105	106	84-130	0	25				
123789-HxCDF	106	104	78-130	3	25				
234678-HxCDF	106	107	70-156	1	25				
1234678-HpCDF	104	104	82-122	1	25				
1234789-HpCDF	104	104	78-138	1	25				
OCDF	102	104	63-170	1	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11147001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6296096	67	73	65	68	71	76
Blank	56	59	51	54	56	55
OPR	63	72	67	69	70	72

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/12/11 at 06:19 PM

Group Number: 1248219

Surrogate Quality Control

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6296096	68	73	73	78	68	64
Blank	57	53	53	83	54	53
OPR	75	72	73	78	69	66
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6296096	68	65	67	69	73	71
Blank	53	53	54	53	64	56
OPR	67	68	71	73	68	73
Limits:	28-130	28-130	23-140	17-157	24-169	24-185
Analysis Name:	10a Dioxin/Furan by EPA 1613B					
Batch number:	11155001					
	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6296078	68	70	57	61	74	73
6296079	60	64	61	64	69	65
6296080	62	65	60	63	69	67
6296081	62	65	67	69	70	70
6296082	63	64	36	41	68	68
6296083	56	55	42	45	56	57
6296084	69	69	52	56	71	74
6296085	81	81	78	79	80	85
6296086	73	71	73	73	73	76
6296087	71	72	68	73	74	73
6296088	70	70	70	70	67	65
6296089	67	67	66	67	68	71
6296090	64	63	65	67	66	64
6296091	72	73	63	65	69	71
6296092	66	69	68	70	69	66
6296093	70	69	56	60	68	66
6296094	84	82	79	81	84	85
6296095	68	66	66	68	68	68
6296097	63	61	56	57	62	65
Blank	65	69	68	73	74	72
MS	64	63	65	67	66	64
MSD	72	73	63	65	69	71
OPR	60	65	65	70	70	66
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6296078	70	65	55	81	72	73
6296079	68	64	58	75	66	70
6296080	65	63	58	78	66	68
6296081	71	67	64	75	67	71

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/12/11 at 06:19 PM

Group Number: 1248219

Surrogate Quality Control

6296082	50	59	51	76	66	65
6296083	48	51	44	60	56	54
6296084	61	66	61	78	70	68
6296085	79	77	72	87	81	79
6296086	72	71	66	79	72	73
6296087	73	72	67	79	73	73
6296088	72	63	60	77	71	68
6296089	66	65	58	76	69	69
6296090	63	57	51	71	64	66
6296091	65	66	60	80	73	68
6296092	72	61	55	76	73	68
6296093	62	58	49	77	70	66
6296094	79	73	59	93	84	83
6296095	66	61	53	74	66	67
6296097	58	55	45	70	61	63
Blank	81	69	65	86	71	76
MS	63	57	51	71	64	66
MSD	65	66	60	80	73	68
OPR	78	61	54	81	65	73

Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF

6296078	74	75	73	68	65	71
6296079	68	71	69	65	58	63
6296080	66	69	67	62	60	64
6296081	71	71	70	68	60	65
6296082	63	70	68	64	60	66
6296083	53	57	57	52	55	55
6296084	69	72	73	74	68	70
6296085	78	80	79	76	79	82
6296086	74	73	72	69	71	71
6296087	70	74	74	71	69	73
6296088	68	68	68	69	68	72
6296089	66	68	66	60	67	67
6296090	64	65	63	58	63	65
6296091	68	69	69	64	71	72
6296092	67	69	67	61	65	70
6296093	67	70	66	59	68	71
6296094	80	84	81	70	83	83
6296095	66	67	66	58	67	68
6296097	60	63	60	53	62	62
Blank	74	76	77	74	61	70
MS	64	65	63	58	63	65
MSD	68	69	69	64	71	72
OPR	70	72	72	71	58	65

Limits:	28-130	28-130	23-140	17-157	24-169	24-185
	13C12-2378-TCDF-Conf					

6296078
6296079
6296080
6296081
6296082
6296083

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 06/12/11 at 06:19 PM

Group Number: 1248219

Surrogate Quality Control

6296084	
6296085	
6296086	77
6296087	
6296088	
6296089	
6296090	
6296091	
6296092	
6296093	
6296094	
6296095	
6296097	67
Blank	70
MS	
MSD	
OPR	

Limits: 24-169

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

13013 1248219 6296078-97

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING				PRIMARY FOR ALL LOCATIONS										VOCs		SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz jar collected from the same interval from which Encores were collected						*Metals EPA 601/602/2083/2171A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCB/MPCs EPA 8082	*Dioxin/Furan EPA 1613B	*Pesticide EPA 314.0	*Hex Chrom EPA 7109	*pH EPA 9045C/9040B	Pesticide Confirmation by EPA 8450 (10%)	VOCs EPA 8260B \$	1,4-Dioxane EPA 8260SIM \$	TPH-GRO EPA 8015B \$	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 8012B	**Triphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B		
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																							
SL-084-SA5DN-SB-4.5	5/23/11	0925	SOIL	NONE	4-Encores										X	X												
SL-084-SA5DN-SB-4.0-5.0	5/23/11	0930	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X						
SL-089-SA5DN-SB-4.5	5/23/11	1020	SOIL	NONE	5-Encores										X	X	X											
SL-089-SA5DN-SB-4.0-5.0	5/23/11	1025	SOIL	NONE	4-16 oz jars	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X		
SL-081-SA5DN-SB-4.5	5/23/11	1300	SOIL	NONE	5-Encores										X	X												
SL-081-SA5DN-SB-4.0-5.0	5/23/11	1310	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X						
SL-081-SA5DN-SB-9.0-10.0	5/23/11	1315	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X						
SL-075-SA5DN-SB-4.5	5/23/11	1535	SOIL	NONE	4-Encores										X	X												
SL-075-SA5DN-SB-4.0-5.0	5/23/11	1540	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X														
SL-075-SA5DN-SB-9.0-10.0	5/23/11	1545	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X														
TB-052311	5/23/11	0800	WATER	HCl	4-40 mL VOA VIALS										X	X	X											
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)												TRIP BLANK												
		05/23/2011 / 1700														Laboratory: Lancaster Laboratories, Inc.												
Received by: (Signature)		Date/Time		Airbill No.(s)																								
		5/24/11 / 0940		8695 1441 7961, 7994, 8008, 7972, 7983																								

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SS ONLY		SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels ‡ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected																													
Sampler Signatures: <i>T Pham</i>																													
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 8010/8208/8717A	*Fluoride EPA 300.0	SVOCS EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8062	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 8850 (10%)	*Pesticides EPA 8061A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	*TPH-EPH EPA 8015B Mod.	*Nitrate EPA 300.0	*Formaldehyde EPA 8315A	*n-NDMA EPA 1625C	*Emeraldine EPA 8330A	*Cyanide EPA 9012B	*Terphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohol EPA 8015B				
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	1-SS sleeve			X	X																				
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	1-SS sleeve			X	X																				
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X	X	X	X													
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-SS sleeve			X	X																				
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	1-SS sleeve			X	X																				
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	1-SS sleeve			X	X																				
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	4-16 oz jar	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	2-SS sleeve			X	X																				
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	1-SS sleeve			X	X																				
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X	X	X	X													
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-SS sleeve			X	X																				
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X	X	X	X													
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-SS sleeve			X	X																				
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	1-SS sleeve			X	X																				
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																						Laboratory:			
<i>[Signature]</i>		05/23/2011 / 1700																								Lancaster Laboratories, Inc.			
Received by: (Signature)		Date/Time		Airbitl No.(s)																									
<i>[Signature]</i>		5/24/2011		8695 1441 7961, 7994, 8008, 7972, 7983																									

13013 1248219 0296078-97

CHAIN OF CUSTODY RECORD

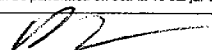
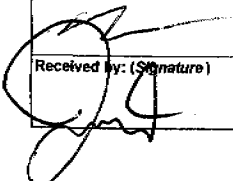
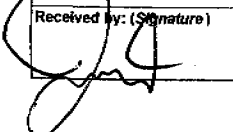
CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SS ONLY	SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels ‡ Moisture by EPA 160.3 will be performed on soil in 15 oz. jar collected from the same interval from which Encores were collected																												
Samplers Signatures: <i>JPM</i>																												
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 60106/60208/60471A	*Fluoride EPA 300.0	SVOCS EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chlorine EPA 7199	pH EPA 9045C/9040B	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**TPH-EPA EPA 8015B Mod	**Nitrate EPA 300.0	**Formaldehyde EPA 8315A	**NDMA EPA 1625C	**Enthalpic EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B				
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	12-1 liter ambers			X	X	X				X	X	X				X	X		X					
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NaOH	1-500 mL glass																X							
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-250 mL glass																							
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-500 mL poly		X				X	X	X					X										
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HNO3	1-500 mL poly	X																						
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HCl	2-40 mL vial																							
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	4-40 mL vial																		X					
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																				Laboratory:				
		05/23/2011 / 1700																						Lancaster Laboratories, Inc.				
Received by: (Signature)		Date/Time		Airbill No.(s)																								
		5/23/2011 / 1700		8695 1441 7961, 7994, 8008, 7972, 7983																								

13013

1248219

6296078-97

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SS ONLY		SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 15 oz. jar collected from the same interval from which Encores were collected																													
Samplers Signatures: 																													
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 60106/62086/7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Pesticides EPA 814.0	*Hex Chlorine EPA 7189	*pH EPA 8045C/8040B	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Methyl Mercury EPA Method 1631	**Organotin NOAA Status Trends	**Formaldehyde EPA 8315A	**NDMA EPA 1625C	**Enthalpies EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B					
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Poly											X													
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Jars												X												
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	3-16 oz. Jars	X	X	X	X	X	X	X	X	X	X														
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Poly											X													
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Jars												X												
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X													
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X													
Relinquished by: (Signature) 		Date/Time 05/23/2011 / 1700		Received for Laboratory by: (Signature)												Laboratory: Lancaster Laboratories, Inc.													
Received by: (Signature) 		Date/Time 5/23/2011		Airbill No.(s) 8695 1441 7961, 7994, 8008, 7972, 7983																									

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

July 19, 2011

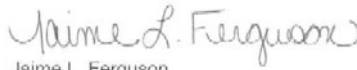
Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 05/24/2011
Group Number: 1248313
PO Number: 1203-004-008-AL
State of Sample Origin: NAClient Sample DescriptionSED-035-SIV-SD Grab Soil Sample
DUP03-SIV-QC-052311 Grab Soil Sample
FB08-SIV-052311 Grab Water SampleLancaster Labs (LLI) #6296495
6296496
6296497ELECTRONIC CDM Federal Services Program
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,


Jaime L. Ferguson
Senior Specialist



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: SED-035-SIV-SD Grab Soil Sample

LLI Sample # SW 6296495

Project Name: SSFL Area IV Collocated Soil Sampling

LLI Group # 1248313

Account # 13013

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 07/19/2011 10:09

Chantilly VA 20151

General Sample Comments

The analysis for Methyl Mercury was subcontracted to another laboratory.
See Attached Reports.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: DUP03-SIV-QC-052311 Grab Soil Sample

LLI Sample # SW 6296496

Project Name: SSFL Area IV Collocated Soil Sampling

LLI Group # 1248313

Account # 13013

Collected: 05/23/2011 15:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 07/19/2011 10:09

Chantilly VA 20151

General Sample Comments

The analysis for Methyl Mercury was subcontracted to another laboratory.
See Attached Reports.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: FB08-SIV-052311 Grab Water Sample

LLI Sample # WW 6296497

Project Name: SSFL Area IV Collocated Soil Sampling

LLI Group # 1248313

Account # 13013

Collected: 05/23/2011 16:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 07/19/2011 10:09

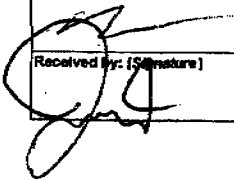
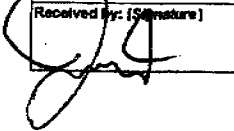
Chantilly VA 20151

General Sample Comments

The analysis for Methyl Mercury was subcontracted to another laboratory.
See Attached Reports.

13013 1248313 6296495-97

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SS ONLY		SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels ‡ Moisture by EPA 160.3 will be performed on soil in 18 oz. jar collected from the same interval from which Encores were collected																													
Samples Signature: 																													
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 8210/8211/8212/8213/8214/8215	*Fluoride EPA 8210.0	*VOCs EPA 8210/8211/8212/8213/8214/8215	*PCBs/PCTs EPA 8210/8211/8212/8213/8214/8215	*Dioxin/Furans EPA 1631/1631a	*Perchlorate EPA 314.0	*Hexachlor EPA 7189	*H EPA 8045/8046/8047	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	*Methyl Mercury EPA Method 1631	*Organic NDA EPA 8210/8211/8212/8213/8214/8215	*Formaldehyde EPA 8151A	*H-NDA EPA 1631C	*Emergent EPA 8210A	*Cyanide EPA 8012B	*Terphenyls EPA 8015B	*Glycols EPA 8015B	*Nucleic EPA 8015B					
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Poly											X													
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Jars												X												
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	3-18 oz. Jars	X	X	X	X	X	X	X	X	X	X														
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Poly											X													
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Jars												X												
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X													
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber												X												
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																				Laboratory:					
		05/23/2011 / 1700																						Lancaster Laboratories, Inc.					
Received by: (Signature)		Date/Time		Airbill No.(s)																									
		5/23/2011		8695 1441 7961, 7994, 8008, 7972, 7983																									

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Tuesday, May 24, 2011 2:44 PM
To: Nicole Maljovec
Cc: Bloisa, Peggy
Subject: Corrections for SSFL COC 5.23.11

Attachments: COC_05_23_11_sediment(1).xlsx



COC_05_23_11_se
diment(1).xlsx ...

Hi Nicole

Now that the dust has settled, Peggy and I have found my mistakes from yesterday. I have attached new updated COCs. I have highlighted the changes in red or yellow. These include:

- 1) SED-035-SIV-SD on the first two lines of the "Sediment Hole" COC should be SED-035-SIV-SDMS. The are the MS/MSD sample.
- 2) DUP01-SIV-SD should be DUP03-SIV-QC-052311
- 3) FB07-SIV-SS-052311 should be FB08-SIV-052311
- 4) For the COC starting with the sample name SL-015-SA5DN-SS-0.0-0.5, SVOCs and PCBs should only be analyzed from the sleeves and not from the jars.
- 5) The 6-40mL vials for the equipment blank will ship today.

Thank you !!

13013 1248313 6296495-97

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SS ONLY			
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected							*Metals EPA 6010/6020B&7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8062	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 8045C/9040B	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Methyl Mercury EPA Method 1631	**Organotin NOAA Status&Trends	Other Instructions and Notes Amended COC	
Samplers Signatures:																				
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers															
SED-035-SIV-SDMS	5.23.11	1500	WET SOIL	NONE	4-8 oz. Poly													X	MS/MSD sample	
SED-035-SIV-SDMS	5.23.11	1500	WET SOIL	NONE	4-8 oz. Jars													X	MS/MSD sample	
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	3-16 oz. Jars	X	X	X	X	X	X	X	X	X	X	X				
DUP03-SIV-QC-052311	5.23.11	1510	WET SOIL	NONE	1-8 oz. Poly													X		
DUP03-SIV-QC-052311	5.23.11	1510	WET SOIL	NONE	1-8 oz. Jars													X		
FB08-SIV-052311	5.23.11	1600	WATER	NONE	1-L Amber													X		
FB08-SIV-052311	5.23.11	1600	WATER	NONE	1-L Amber													X		
Relinquished by: (Signature)		Date/Time 05/23/2011 / 1700		Received for Laboratory by: (Signature)															Laboratory: Lancaster Laboratories, Inc.	
Received by: (Signature)		Date/Time		Airbill No.(s) 8695 1441 7961, 7994, 8008, 7972, 7983																



**Report to
Lancaster Labs, Inc.**

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July 6, 2011

Frontier Global Sciences Inc.
414 Pontius Ave. N
Seattle, WA 98109

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06 July 2011

Elizabeth Leonhardt
Lancaster Labs, Inc.
2425 New Holland Pike, PO Box 12425
Lancaster, PA 17605-2425
RE: Methyl Mercury Analysis

Enclosed are the analytical results for samples received by Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Cindy Fields". The script is cursive and fluid.

Cindy Fields
Project Manager



414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
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ANALYTICAL REPORT FOR SAMPLES

Laboratory: Frontier Global Sciences, Inc.

SDG:

Client: Lancaster Labs, Inc.

Project: Methyl Mercury Analysis

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SED-035-SIV-SDMS	1105316-01	Soil/Sediment	23-May-11 15:00	25-May-11 09:41
DUP03-SIV-QC-052311	1105316-02	Soil/Sediment	23-May-11 15:10	25-May-11 09:41
FB08-SIV-052311	1105316-03	Water	23-May-11 16:00	25-May-11 09:41

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

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CASE NARRATIVE

Work Order Number: 1105316:

SAMPLE RECEIPT

One (1) water and four (4) soil samples were received at Frontier Global Sciences, Inc. (Frontier) on May 25, 2011 for methyl mercury analysis. The water sample and two of the sediment samples (in amber glass jars) were labeled for organotin analysis. The two sediment samples received in polypropylene (PP) jars for methyl mercury were both labeled as 6296495. These two 250mL PP jars were entered into FGS LIMS as 1105316-01A and 1105316-01B. The duplicate sample was not received in the shipment.

These samples were received in a sealed cooler with a temperature of 0.7°C degrees Celsius. Upon request, the sediment samples in amber glass, labeled for organotin analysis, were placed in a sealed cooler, on ice, and shipped to Test America, Vermont for overnight delivery. Delivery was confirmed on May 26, 2011.

The water sample was pH tested and then preserved to 0.4% (v/v) with concentrated hydrochloric acid.

On May 27, 2011, Frontier received one additional container for SED-035 (labeled SED-035 by the client on their label and 6246498 by Lancaster) and the duplicate (labeled as DUP on the client label and 6296499 by Lancaster). These samples were received in a sealed cooler with a temperature of 0.2°C degrees Celsius. The additional container for SED-035 was labeled as 1105316-01C. The container received for DUP was labeled as 1105316-02A.

On June 2, the sample IDs were updated per the client's request as follows:

SED-035-SIV-SD became SED-035-SIV-SDMS
DUP01-SIV-SD became DUP03-SIV-QC-052311
FB07-SIV-SS-052311 became FB08-SIV-052311

SAMPLE PREPARATION

Water samples were distilled under nitrogen at 120 °C in the presence of ammonium pyrrolidine dithiocarbamate, according to EPA 1630 (Standard Operating Procedure (SOP) FGS-013) prior to analysis.

Soil samples were extracted according to SOP FGS-045 prior to analysis. Samples were vigorously shaken for one hour with methylene chloride, acidic potassium bromide (KBr) and copper sulfate solutions. After centrifugation and removal of the aqueous layer, an aliquot of methylene chloride was added to water and purged with nitrogen for approximately thirty minutes to remove the methylene chloride. The sample, now in the aqueous phase, was brought to final volume with reagent water.

SAMPLE ANALYSIS

Methyl mercury was analyzed in distilled/extracted samples by cold vapor gas chromatography atomic fluorescence spectrometry (CV-GC-AFS) according to EPA method 1630 (FGS-070).

ANALYTICAL AND QUALITY CONTROL ISSUES

The extracted sediment certified reference material (CRM) had a recovery below the lower control limit of 80%, at 35.5%. The low recovery of the extract was confirmed by reanalysis (using different component combinations to investigate hardware failure). The sample extract was repurged (an aliquot of methylene chloride was added to water and purged with nitrogen for approximately thirty minutes to remove the methylene chloride) and reanalyzed with acceptable results. As the CRM duplicate (F105376-BSD1) and other batch QC samples (F105376-MS/MSD1, F105376-MS/MSD2, F105376-MS/MSD3 and F105376-DUP1) were all within control limits, no further action was

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Cindy Fields, Project Manager

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taken. The failing CRM data points have been excluded from this report.

There were no additional analytical difficulties and all quality control analyses were within acceptable limits, except as noted in this report.

Please feel free to contact me if you have any questions or concerns.

Frontier Global Sciences, Inc.

A handwritten signature in black ink that reads "Cindy Fields". The signature is written in a cursive, flowing style.

Cindy Fields, Project Manager

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CHAIN OF CUSTODY FORMS

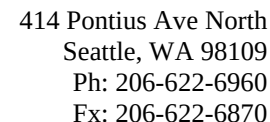
		Chain of Custody Record & Laboratory Analysis Request: Air, Water, Sediments, Plant and Animal Tissue, Hydrocarbon & Other Samples		414 Pontius Ave. N. Seattle WA 98109 Phone: 206-622-6960 Fax: 206-622-6870 info@FrontierGS.com http://www.FrontierGS.com																																																																																																																																																																	
Client: Lancaster Laboratories Address: 2425 New Holland Pike Lancaster, PA 17601 Project Name: <i>SSFL Area IV Co-located</i> Report To: Kathy Binkley <i>Sampling</i> Address: Same as above Phone: _____ Fax: _____ E-mail: kbinkley@lancasterlabs.com		Contact: Nicole Maljovec Phone: 717-656-2300x1537 E-mail: NMaljovec@lancasterlabs.com Contract/PO: Invoice To: Kathy Binkley Address: Same as above Phone: _____ Fax: _____ E-mail: kbinkley@lancasterlabs.com		1105316 Page ____ of ____																																																																																																																																																																	
<table border="1"> <thead> <tr> <th>No.</th> <th>Engraved Bottle ID</th> <th>Sample ID</th> <th># of Bottles</th> <th>Matrix</th> <th>Date & Time</th> </tr> </thead> <tbody> <tr><td>1</td><td>6296495</td><td>SED-035-SIV-SD Grab</td><td></td><td>Soil</td><td>05/23/11 15:00</td></tr> <tr><td>2</td><td>6296496 <i>95 *</i></td><td>DUP01-SIV-SD Grab</td><td></td><td>Soil</td><td>05/23/11 15:10</td></tr> <tr><td>3</td><td>6296497</td><td>FB07-SIV-SS-052311 <i>Grab</i></td><td></td><td>Water</td><td>05/23/11 16:00</td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>		No.	Engraved Bottle ID	Sample ID	# of Bottles	Matrix	Date & Time	1	6296495	SED-035-SIV-SD Grab		Soil	05/23/11 15:00	2	6296496 <i>95 *</i>	DUP01-SIV-SD Grab		Soil	05/23/11 15:10	3	6296497	FB07-SIV-SS-052311 <i>Grab</i>		Water	05/23/11 16:00	4						5						6						7						8						9						10						11						12						<table border="1"> <thead> <tr> <th>Analyses Requested</th> <th>Field Preserved:</th> <th>Field Filtered (Y/N)</th> <th>Field Preserved:</th> <th>Field Preserved:</th> <th>Field Preserved:</th> </tr> <tr> <th></th> <th>HNO₃</th> <th>HCl</th> <th>BrCl</th> <th>Other (%)</th> <th></th> </tr> </thead> <tbody> <tr> <td><i>Methyl Mercury</i></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>		Analyses Requested	Field Preserved:	Field Filtered (Y/N)	Field Preserved:	Field Preserved:	Field Preserved:		HNO ₃	HCl	BrCl	Other (%)		<i>Methyl Mercury</i>																																																																							
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Sample Disposal: ☐ Return (shipping fees may apply) ☐ Standard Disposal – 30 Days after report ☐ Retain for _____ weeks after report (storage fees may apply)		By signing, you declare that you agree with FGS' terms and conditions, and that you authorize FGS to perform the specified analyses. Customer Approval: <i>[Signature]</i> Date: <i>5/24/11</i>																																																																																																																																																																			

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Cindy Fields

Cindy Fields, Project Manager

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For Lancaster Laboratories Use Only
Acct: 13013 Group No.: 1249

Acct: 13013

Group No.: 1248314

Sample Nos.: 6296498-500

Date: 5/24/2011

1105352

[illegible]

Lancaster Laboratories, Inc. 2425 New Holland Pike Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766
Copies: White copy should accompany samples to Lancaster Laboratories. The yellow copy should be retained by the samplers.

Cindy Fields

1105316 Final Report
Page 7 of 69



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Seattle, WA 98109
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Fx: 206-622-6870

Methyl Mercury Analytical Results

Matrix: Soil/Sediment

Preparation: Methylene Chloride Extraction for Methyl Hg

Sample Name	Result	MRL	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
SED-035-SIV-SDMS	0.452	0.133	µg/kg dry	1.05	F105376	05/30/11	1F01010	06/01/11	PA 1630 Mc	
DUP03-SIV-QC-052311	0.275	0.091	µg/kg dry	0.95	F105376	05/30/11	1F01010	06/01/11	PA 1630 Mc	

Matrix: Water

Preparation: Methyl Hg Distillation for Water

Sample Name	Result	MRL	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
FB08-SIV-052311	ND	0.050	ng/L	1.25	F105371	05/30/11	1F01012	06/01/11	EPA 1630	U

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% Solids Analytical Results

Matrix: Soil/Sediment

Preparation: Solids Analysis

Sample Name	Result	MRL	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
SED-035-SIV-SDMS	44.2	0.1	% by Weight	1	F105379	05/30/11		05/31/11	SM 2540B	O-09
DUP03-SIV-QC-052311	58.2	0.1	% by Weight	1	F105379	05/30/11		05/31/11	SM 2540B	O-09

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MATRIX DUPLICATES/TRIPPLICATES

SOURCE: 1105274-07

Matrix: Water

Sequence: 1F01012

Batch: F105371

Lab Number: F105371-DUP1

Preparation: Methyl Hg Distillation for Water

Analyte	Sample Concentration ng/L	Duplicate Concentration ng/L	MRL	% RPD	RPD Limit	Method	Notes
Methyl Mercury	0.110	0.166	0.050	40.7	25	EPA 1630	QR-07

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Cindy Fields, Project Manager

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MATRIX DUPLICATES/TRIPLICATES

SOURCE: 1105304-01

Matrix: Soil/Sediment

Sequence: 1F01010

Batch: F105376

Lab Number: F105376-DUP1

Preparation: Methylene Chloride Extraction for Methyl Hg

Analyte	Sample Concentration µg/kg dry	Duplicate Concentration µg/kg dry	MRL	% RPD	RPD Limit	Method	Notes
Methyl Mercury	2.046	2.456	0.112	18.2	25	EPA 1630 Mod	

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MATRIX DUPLICATES/TRIPPLICATES

SOURCE: 1105304-04

Matrix: Soil/Sediment

Sequence:

Batch: F105379

Lab Number: F105379-DUP1

Preparation: Solids Analysis

Analyte	Sample Concentration % by Weight	Duplicate Concentration % by Weight	MRL	% RPD	RPD Limit	Method	Notes
% Solids	47.4	49.9	0.1	5.14	10	SM 2540B	O-09

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MATRIX DUPLICATES/TRIPPLICATES

SOURCE: 1105274-01

Matrix: Soil/Sediment

Sequence:

Batch: F105379

Lab Number: F105379-DUP2

Preparation: Solids Analysis

Analyte	Sample Concentration % by Weight	Duplicate Concentration % by Weight	MRL	% RPD	RPD Limit	Method	Notes
% Solids	34.6	34.2	0.1	1.16	10	SM 2540B	O-09

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Cindy Fields

Cindy Fields, Project Manager

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1105274-07

Matrix: Water

Sequence: 1F01012

Batch: F105371

Lab Number: F105371-MS/MSD1

Preparation: Methyl Hg Distillation for Water

Analyte	Sample Concentration (ng/L)	Spike Added (ng/L)	MS Concentration (ng/L)	MS % Recovery	Recovery Limits	Method	Notes
Methyl Mercury	0.110	2.0000	2.393	114	65 - 130	EPA 1630	

Analyte	Spike Added (ng/L)	MSD Concentration (ng/L)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	2.0000	2.345	112	2.01	65 - 130	25	EPA 1630	

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Cindy Fields

Cindy Fields, Project Manager

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1105274-01

Matrix: Soil/Sediment

Sequence: 1F01010

Batch: F105376

Lab Number: F105376-MS/MSD1

Preparation: Methylene Chloride Extraction for Methyl Hg

Analyte	Sample Concentration (µg/kg dry)	Spike Added (µg/kg dry)	MS Concentration (µg/kg dry)	MS % Recovery	Recovery Limits	Method	Notes
Methyl Mercury	0.394	13.737	16.01	114	65 - 130	EPA 1630 Moc	

Analyte	Spike Added (µg/kg dry)	MSD Concentration (µg/kg dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	13.949	16.37	115	0.745	65 - 130	25	EPA 1630 Moc	

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1105304-04

Matrix: Soil/Sediment

Sequence: 1F01010

Batch: F105376

Lab Number: F105376-MS/MSD2

Preparation: Methylene Chloride Extraction for Methyl Hg

Analyte	Sample Concentration (µg/kg dry)	Spike Added (µg/kg dry)	MS Concentration (µg/kg dry)	MS % Recovery	Recovery Limits	Method	Notes
Methyl Mercury	3.332	9.9140	13.23	99.9	65 - 130	EPA 1631 Mod	

Analyte	Spike Added (µg/kg dry)	MSD Concentration (µg/kg dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	10.008	13.36	100	0.316	65 - 130	25	EPA 1631 Mod	

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1105316-01

Matrix: Soil/Sediment

Sequence: 1F01010

Batch: F105376

Lab Number: F105376-MS/MSD3

Preparation: Methylene Chloride Extraction for Methyl Hg

Analyte	Sample Concentration (µg/kg dry)	Spike Added (µg/kg dry)	MS Concentration (µg/kg dry)	MS % Recovery	Recovery Limits	Method	Notes
Methyl Mercury	0.359	10.898	12.09	108	65 - 130	EPA 1631 Mod	

Analyte	Spike Added (µg/kg dry)	MSD Concentration (µg/kg dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	10.983	11.92	105	2.25	65 - 130	25	EPA 1631 Mod	

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LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

RECOVERY AND RPD

Matrix: Water

Sequence: 1F01012

Batch: F105371

Lab Number: F105371-BS/BSD1

Preparation: Methyl Hg Distillation for Water

LCS Source: Blank Spike

Analyte	Spike Added (ng/L)	LCS Concentration (ng/L)	LCS % Recovery	Recovery Limits	Method	Notes
Methyl Mercury	2.0000	2.119	106	70 - 130	EPA 1630	

Analyte	Spike Added (ng/L)	LCSD Concentration (ng/L)	LCSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	2.0000	2.238	112	5.47	70 - 130	25	EPA 1630	

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Cindy Fields

Cindy Fields, Project Manager

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LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

RECOVERY AND RPD

Matrix: Soil/Sediment

Sequence: 1F01010

Batch: F105376

Lab Number: F105376-BS/BSD1

Preparation: Methylene Chloride Extraction for Methyl Hg

LCS Source: IAEA-405

Analyte	Spike Added (µg/kg wet)	LCS Concentration (µg/kg wet)	LCS % Recovery	Recovery Limits	Method	Notes
Methyl Mercury	5.3802	5.378	100	70 - 130	EPA 1630 Mod	

Analyte	Spike Added (µg/kg)	LCSD Concentration (µg/kg wet)	LCSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	5.3802	5.766	107	6.96	70 - 130	25	EPA 1630 Mod	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

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414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

PREPARATION BLANKS

Matrix: Soil/Sediment

Sequence: 1F01010

Instrument: Hg-07

Preparation: Methylene Chloride Extraction for Methyl Hg

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F105376-BLK1	Methyl Mercury	0.001	0.050	µg/kg wet	F105376	EPA 1630 Mod	U
F105376-BLK2	Methyl Mercury	0.003	0.050	µg/kg wet	F105376	EPA 1630 Mod	U
F105376-BLK3	Methyl Mercury	0.004	0.050	µg/kg wet	F105376	EPA 1630 Mod	U

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

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414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

INITIAL AND CONTINUING CALIBRATION BLANKS

Matrix: Soil/Sediment

Sequence: 1F01010

Instrument: Hg-07

Preparation: No Preparation

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
1F01010-ICB1	Methyl Mercury	0.003	0.101	ng/L	1F01010	EPA 1630 Mod	
1F01010-CCB1	Methyl Mercury	-0.0008	0.101	ng/L	1F01010	EPA 1630 Mod	U
1F01010-CCB2	Methyl Mercury	0.0006	0.101	ng/L	1F01010	EPA 1630 Mod	
1F01010-CCB3	Methyl Mercury	-0.002	0.101	ng/L	1F01010	EPA 1630 Mod	U
1F01010-CCB4	Methyl Mercury	-0.0008	0.101	ng/L	1F01010	EPA 1630 Mod	U

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

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414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

PREPARATION BLANKS

Matrix: Water

Sequence: 1F01012

Instrument: Hg-15

Preparation: Methyl Hg Distillation for Water

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F105371-BLK1	Methyl Mercury	-0.002	0.050	ng/L	F105371	EPA 1630	U
F105371-BLK2	Methyl Mercury	0.004	0.050	ng/L	F105371	EPA 1630	U
F105371-BLK3	Methyl Mercury	-0.0006	0.050	ng/L	F105371	EPA 1630	U

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

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414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

INITIAL AND CONTINUING CALIBRATION BLANKS

Matrix: Water

Sequence: 1F01012

Instrument: Hg-15

Preparation: No Preparation

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
1F01012-ICB1	Methyl Mercury	-0.0004	0.045	ng/L	1F01012	EPA 1630	U
1F01012-CCB1	Methyl Mercury	0.0004	0.045	ng/L	1F01012	EPA 1630	
1F01012-CCB2	Methyl Mercury	-0.0004	0.045	ng/L	1F01012	EPA 1630	U
1F01012-CCB3	Methyl Mercury	0.0004	0.045	ng/L	1F01012	EPA 1630	

Frontier Global Sciences, Inc.

Cindy Fields

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414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Instrument ID: Hg-07

Sequence: 1F01010

Lab Sample ID	Analyte	True ng/L	Found ng/L	% Recovery	Control Limits	Method	Notes
1F01010-ICV1	Methyl Mercury	2.0000	1.787	89.3	80 - 120%	EPA 1630 Mod	
1F01010-CCV1	Methyl Mercury	2.0000	2.248	112	75 - 125%	EPA 1630 Mod	
1F01010-CCV2	Methyl Mercury	2.0000	2.025	101	75 - 125%	EPA 1630 Mod	
1F01010-CCV3	Methyl Mercury	2.0000	2.095	105	75 - 125%	EPA 1630 Mod	
1F01010-CCV4	Methyl Mercury	2.0000	2.039	102	75 - 125%	EPA 1630 Mod	

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414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Instrument ID: Hg-15

Sequence: 1F01012

Lab Sample ID	Analyte	True ng/L	Found ng/L	% Recovery	Control Limits	Method	Notes
1F01012-ICV1	Methyl Mercury	2.0000	1.742	87.1	80 - 120%	EPA 1630	
1F01012-CCV1	Methyl Mercury	2.0000	2.113	106	75 - 125%	EPA 1630	
1F01012-CCV2	Methyl Mercury	2.0000	2.027	101	75 - 125%	EPA 1630	
1F01012-CCV3	Methyl Mercury	2.0000	1.897	94.9	75 - 125%	EPA 1630	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

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Notes and Definitions

U	Analyte included in the analysis, but not detected
QR-07	The RPD/RSD value for the matrix duplicate/triplicate was outside of acceptance limits. Batch QC acceptable based on MS/MSD and/or LCS/LCSD RPD values within control limits.
O-09	Total Solids are prepared at the same time as the preparation for the analyte(s) of interest in order to provide the most accurate dry mass correction.
O-04	This sample was analyzed outside of the recommended holding time.
DET	Analyte Detected
MRL	Minimum Reporting Limit
ND	Analyte Not Detected at or above the reporting limit
wet	Sample results reported on a wet weight basis
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
RSD	Relative Standard Deviation

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

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Frontier Global Sciences, Inc
High QA Report: MHg CV AFS
Analyst: Adela Blaga
Sequence: 1F01010 (MHg07-110601-1), Batch F105376
Reviewer: Lucas Knowles
Reviewed Date: 6/9/2011

LMK 6/10/11

Client(s): Lancaster Labs (WO# 1105316)

Client specific QC: See WO.

- (1) Calibration was performed on at least five calibration standards.
 - o There were five standards analyzed for the calibration curve and all five points were included in the curve.
 - o For the low calibration standard, 0.05 ng, recovery was 107%.
- (2) The calibration curve used at least five standards and achieved an RSD CF $\leq 15\%$.
 - o Yes: 11.2%
- (3) All LCS have %Rec within 70-130%.
 - o F105376-BS1/BSD1 (IAEA-405, LIMS# 0800436) were analyzed with recoveries of 100% and 107%. The initial BS (Trap 5 and Bubbler 4) failed recovery and was renamed BS2 and set to do not report. A trap and bubbler test was performed as BS3 and BS4 and both failed recovery. A re-purge was performed from the original extraction and passed. Passing BS was named BS1 and reported.
- (4) LCS/CRM RPD < 25%.
 - o The RPD between BS1 and BSD1 was 6.96%.
- (5) All sample MS and MSD have %Rec within 65-130% unless spike concentration is less than 1x the ambient concentration.
 - o F105376-MS1 and MSD1 were analyzed on 1105274-01, and the recoveries were 114% and 115% with an RPD of 0.745%.
 - o F105376-MS2 and MSD2 were analyzed on 1105304-04, and the recoveries were 99.9% and 100% with an RPD of 0.316%.
 - o F105376-MS3 and MSD3 were analyzed on 1105316-01, and the recoveries were 108% and 105% with an RPD of 2.25%.
- (6) All ICB & CCB < 0.025 ng/L
 - o Yes: 0.005 ± 0.002
- (7) PB < PQL (0.05 ng/L)
 - o Prep blank frequency: Three preparation blanks were analyzed, and all results were below the PQL. The mean of the three blanks was 0.005 ng/L.
- (8) MD RPD/MT RSD < 25%.
 - o F105376-DUP1: Sample 1105304-01 was analyzed in duplicate. RPD was 18.2%.
- (9) MS/MSD RPD < 25%.
 - o In control, see 5.
- (10) ICV (80-120%) and CCVs (75-125%) % recoveries are within control limits.
 - o One ICV and four CCVs were run at a 2.000 ng/L concentration. Recovery results were 89.3%, 112%, 101%, 105% and 102%.
- (11) All reported samples are within standard calibration range.
 - o All samples on WO 1105316 were within calibration range or analyzed at the maximum aliquot size.

Frontier Global Sciences, Inc
High QA Report: MHg CV AFS
Analyst: Adela Blaga
Sequence: 1F01010 (MHg07-110601-1), Batch F105376
Reviewer: Lucas Knowles
Reviewed Date: 6/9/2011

-Peer Reviewer checked transcriptions and calculations.

Follow-up items:

Email correspondence among the QA coordinator, lab manager, AL group leader, and PM group leader detailing qualifications or corrective actions may be appended to this report.

All analytical issues or other problems:

- None.

Frontier GeoSciences, Inc.

Analysis Datasheet for Methyl Mercury in Solids

Date of Analysis: 6/1/11

Instrument #: Hg-07

LIMS Sequence #: 1F01010

Analyst: LS

Units ng/L

Time Begin: 10:01

Time End 19:28

Sample Count: 51

Calibration Statistics:

LabNumber	n	True Val	Peak Height or Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	4.20 units	84.00	3.84 units	76.80	107.5 %Rec
SEQ-CAL2	1	1.00 ng/L	76.60 units	76.60	76.24 units	76.24	106.7 %Rec
SEQ-CAL3	1	2.00 ng/L	154.00 units	77.00	153.64 units	76.82	107.5 %Rec
SEQ-CAL4	1	4.00 ng/L	234.00 units	58.50	233.64 units	58.41	81.8 %Rec
SEQ-CAL5	1	0.20 ng/L	14.15 units	70.75	13.79 units	68.95	96.5 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF
71.44

Corr. St Dev RF
+/- 8.01

Corr. RSD CF
11.2% RSD

Uncorr. Mean RF
73.37

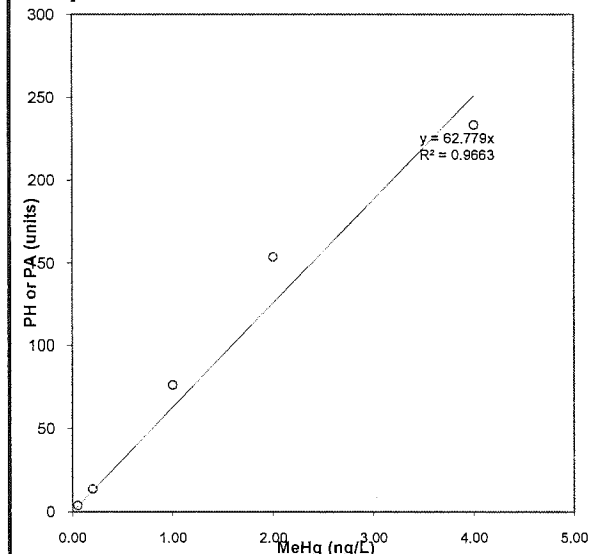
Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-ICB					
SEQ-CCB					
SEQ-IBL	5	0.36 units	±0.15	0.005 ng/L	±0.002

Preparation Blanks

Sample Type	Group ID	n	Mean	Std Dev
BLK	1	3	0.005 ng/L	±0.003
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

Response Factor



QUALITY ASSURANCE
PEER-REVIEWED

QUALITY ASSURANCE REVIEWED

INITIALS: LMK 6/10/11

INITIALS: PC 6/10/11

FileID	Instrument	Analyst	Analyzed	Tp	Bub	Sample Type	LabNumber	Aliquot Volume	Instrumental Conc.	Group ID	No PB Correction?	Uncorrected PH	Instrumental Dilution	RESP	Dilution	InitialResult	FinalResult	InitialUnits	Comments
0701	Hq-07	LS	6/1/11 10:01	1	1	CAL	SEQ-CAL1	50.000 mL	0.003 nq			4.2		3.8	1.00	0.0537	0.0537	ng/L	
0702	Hq-07	LS	6/1/11 10:12	3	2	CAL	SEQ-CAL2	50.000 mL	0.053 nq			76.6		76.2	1.00	1.0671	1.0671	ng/L	
0703	Hq-07	LS	6/1/11 10:23	4	3	CAL	SEQ-CAL3	50.000 mL	0.108 nq			154.0		153.6	1.00	2.1505	2.1505	ng/L	
0704	Hq-07	LS	6/1/11 10:34	5	4	CAL	SEQ-CAL4	50.000 mL	0.164 nq			234.0		233.6	1.00	3.2703	3.2703	ng/L	
0705	Hq-07	LS	6/1/11 10:45	6	1	CAL	SEQ-CAL5	50.000 mL	0.010 nq			14.2		13.8	1.00	0.1930	0.1930	ng/L	
0706	Hq-07	LS	6/1/11 10:56	7	2	CAL	SEQ-ICV1	50.000 mL	0.089 nq			128.0		127.6	1.00	1.7866	1.7866	ng/L	89.3 %Rec
0707	Hq-07	LS	6/1/11 11:07	8	3	CAL	SEQ-ICB1	50.000 mL	0.000 nq			0.6		0.2	1.00	0.0034	0.0034	ng/L	
0708	Hq-07	LS	6/1/11 11:18	1	1	BLK	F105376-BLK1	57.600 mL	0.000 nq	1		0.5		0.1	0.87	0.0020	0.0017	ng/L	
0709	Hq-07	LS	6/1/11 11:29	3	2	BLK	F105376-BLK2	57.600 mL	0.000 nq	1		0.8		0.4	0.87	0.0062	0.0053	ng/L	
0710	Hq-07	LS	6/1/11 11:41	4	3	BLK	F105376-BLK3	57.600 mL	0.000 nq	1		1.0		0.6	0.87	0.0090	0.0078	ng/L	
0711	Hq-07	LS	6/1/11 11:52	5	4	SAM	F105376-BS2	10.000 mL	0.013 nq	1		19.4		19.0	5.00	0.2655	1.3275	ng/L	35.5 %Rec
0712	Hq-07	LS	6/1/11 12:03	6	1	SAM	F105376-BSD1	10.000 mL	0.040 nq	1		57.7		57.3	5.00	0.8009	4.0045	ng/L	107.2 %Rec
0713	Hq-07	LS	6/1/11 12:14	7	2	SAM	*1105274-01	10.000 mL	0.003 nq	1		4.0		3.6	5.00	0.0500	0.2498	ng/L	RR#0720
0714	Hq-07	LS	6/1/11 12:25	8	3	SAM	1105304-04	52.600 mL	0.154 nq	1		220.0		219.6	0.95	3.0691	2.9174	ng/L	
0715	Hq-07	LS	6/1/11 12:36	1	4	SAM	*1105316-01	10.000 mL	0.003 nq	1		4.5		4.1	5.00	0.0570	0.2848	ng/L	RR#0721
0716	Hq-07	LS	6/1/11 12:47	3	1	SAM	*1105274-02	10.000 mL	0.006 nq	1		8.5		8.1	5.00	0.1129	0.5647	ng/L	
0717	Hq-07	LS	6/1/11 12:58	4	2	SAM	*1105274-03	10.000 mL	0.001 nq	1		1.2		0.8	5.00	0.0108	0.0538	ng/L	
0718	Hq-07	LS	6/1/11 13:10	6	3	CAL	SEQ-CCV1	50.000 mL	0.112 nq			161.0		160.6	1.00	2.2485	2.2485	ng/L	112.4 %Rec
0719	Hq-07	LS	6/1/11 13:21	7	4	CAL	SEQ-CCB1	50.000 mL	0.000 nq			0.3		-0.1	1.00	-0.0008	-0.0008	ng/L	
0720	Hq-07	LS	6/1/11 13:32	8	1	SAM	1105274-01RE1	47.600 mL	0.013 nq	1		19.0		18.6	1.05	0.2562	0.2691	ng/L	
0721	Hq-07	LS	6/1/11 13:43	1	2	SAM	1105316-01RE1	47.600 mL	0.017 nq	1		25.1		24.7	1.05	0.3416	0.3588	ng/L	
0722	Hq-07	LS	6/1/11 13:54	5	3	SAM	F105376-BS3	10.000 mL	0.010 nq	1		15.0		14.6	5.00	0.2039	1.0196	ng/L	
0723	Hq-07	LS	6/1/11 14:05	3	4	SAM	F105376-BS4	10.000 mL	0.013 nq	1		18.6		18.2	5.00	0.2543	1.2716	ng/L	
0724	Hq-07	LS	6/1/11 14:16	4	1	SAM	F105376-DUP1	47.600 mL	0.111 nq	1		159.0		158.6	1.05	2.2158	2.3275	ng/L	
0725	Hq-07	LS	6/1/11 14:27	6	2	SAM	F105376-MS2	10.000 mL	0.116 nq	1		166.0		165.6	5.00	2.3175	11.5874	ng/L	
0726	Hq-07	LS	6/1/11 14:38	7	3	SAM	F105376-MSD2	10.000 mL	0.116 nq	1		166.0		165.6	5.00	2.3175	11.5874	ng/L	
0727	Hq-07	LS	6/1/11 14:50	8	4	SAM	1105304-01	10.000 mL	0.020 nq	1		29.0		28.6	5.00	0.3999	1.9994	ng/L	
0728	Hq-07	LS	6/1/11 15:01	1	1	SAM	1105304-02	10.000 mL	0.033 nq	1		47.0		46.6	5.00	0.6518	3.2592	ng/L	
0729	Hq-07	LS	6/1/11 15:12	3	2	SAM	1105304-03	10.000 mL	0.030 nq	1		43.3		42.9	5.00	0.5993	2.9967	ng/L	
0730	Hq-07	LS	6/1/11 15:23	4	3	CAL	SEQ-CCV2	50.000 mL	0.101 nq			145.0		144.6	1.00	2.0245	2.0245	ng/L	101.2 %Rec
0731	Hq-07	LS	6/1/11 15:34	4	4	CAL	SEQ-CCB2	50.000 mL	0.000 nq			0.4		0.0	1.00	0.0006	0.0006	ng/L	
0732	Hq-07	LS	6/1/11 15:45	5	1	SAM	F105376-MS1	10.000 mL	0.101 nq	1		145.0		144.6	5.00	2.0235	10.1177	ng/L	
0733	Hq-07	LS	6/1/11 15:56	6	2	SAM	F105376-MSD1	10.000 mL	0.102 nq	1		146.0		145.6	5.00	2.0375	10.1877	ng/L	
0734	Hq-07	LS	6/1/11 16:07	7	3	SAM	F105376-MS3	10.000 mL	0.096 nq	1		138.0		137.6	5.00	1.9256	9.6278	ng/L	
0735	Hq-07	LS	6/1/11 16:19	8	4	SAM	F105376-MSD3	10.000 mL	0.094 nq	1		135.0		134.6	5.00	1.8836	9.4178	ng/L	
0736	Hq-07	LS	6/1/11 16:30	1	1	SAM	*1105304-05	10.000 mL	0.003 nq	1		4.6		4.2	5.00	0.0584	0.2918	ng/L	RR#0748
0737	Hq-07	LS	6/1/11 16:41	3	2	SAM	1105304-06	10.000 mL	0.008 nq	1		11.8		11.4	5.00	0.1591	0.7957	ng/L	
0738	Hq-07	LS	6/1/11 16:52	4	3	SAM	1105316-02	52.600 mL	0.015 nq	1		22.5		22.1	0.95	0.3047	0.2896	ng/L	
0739	Hq-07	LS	6/1/11 17:03	5	4	SAM	1105343-01	10.000 mL	0.012 nq	1		17.0		16.6	5.00	0.2319	1.1596	ng/L	
0740	Hq-07	LS	6/1/11 17:14	6	1	SAM	F105376-BS1	10.000 mL	0.037 nq	1		53.8		53.4	5.00	0.7470	3.7351	ng/L	
0741	Hq-07	LS	6/1/11 17:25	7	2	SAM	1105343-02	10.000 mL	0.003 nq	1		4.0		3.6	5.00	0.0500	0.2498	ng/L	
0742	Hq-07	LS	6/1/11 17:36	8	3	CAL	SEQ-CCV3	50.000 mL	0.105 nq			150.0		149.6	1.00	2.0945	2.0945	ng/L	104.7 %Rec
0743	Hq-07	LS	6/1/11 17:47	1	4	CAL	SEQ-CCB3	50.000 mL	0.000 nq			0.2		-0.2	1.00	-0.0022	-0.0022	ng/L	
0744	Hq-07	LS	6/1/11 17:59	3	1	SAM	1105343-03	20.000 mL	0.010 nq	1		15.1		14.7	2.50	0.2043	0.5108	ng/L	
0745	Hq-07	LS	6/1/11 18:10	4	2	SAM	1105344-01	20.000 mL	0.045 nq	1		65.0		64.6	2.50	0.9028	2.2570	ng/L	112.8 %Rec
0746	Hq-07	LS	6/1/11 18:21	5	3	SAM	1105274-02RE1	47.600 mL	0.031 nq	1		44.1		43.7	1.05	0.6075	0.6382	ng/L	
0747	Hq-07	LS	6/1/11 18:32	6	4	SAM	1105274-03RE1	47.600 mL	0.003 nq	1		5.0		4.6	1.05	0.0602	0.0633	ng/L	
0748	Hq-07	LS	6/1/11 18:43	7	1	SAM	1105304-05RE1	47.600 mL	0.014 nq	1		21.1		20.7	1.05	0.2849	0.2993	ng/L	
0749	Hq-07	LS	6/1/11 18:54	8	2	SAM	1105343-02RE1	47.600 mL	0.010 nq	1		15.2		14.8	1.05	0.2030	0.2132	ng/L	
0750	Hq-07	LS	6/1/11 19:05	1	3	CAL	SEQ-CCV4	50.000 mL	0.102 nq			146.0		145.6	1.00	2.0385	2.0385	ng/L	
0751	Hq-07	LS	6/1/11 19:16	3	4	CAL	SEQ-CCB4	50.000 mL	0.000 nq			0.3		-0.1	1.00	-0.0008	-0.0008	ng/L	

Fl 05376-BS3
 1105274-02R57
 1105274-01R57

SS-CCB1

SS-CCB1

1105274-03
 1105274-02

10	20	30	40	50	60	70	80	90	100
90	80	70	60	50	40	30	20	10	0

1105316-01

1105307-04

1105274-01

Fl 05376-BS101

Fl 05376-BS2

Fl 05376-BS3

Fl 05376-BS4

Fl 05376-BS5

42598

10	20	30	40	50	60	70	80	90	100
90	80	70	60	50	40	30	20	10	0

SS-CCB1

SS-CCB1

SS-CCB5

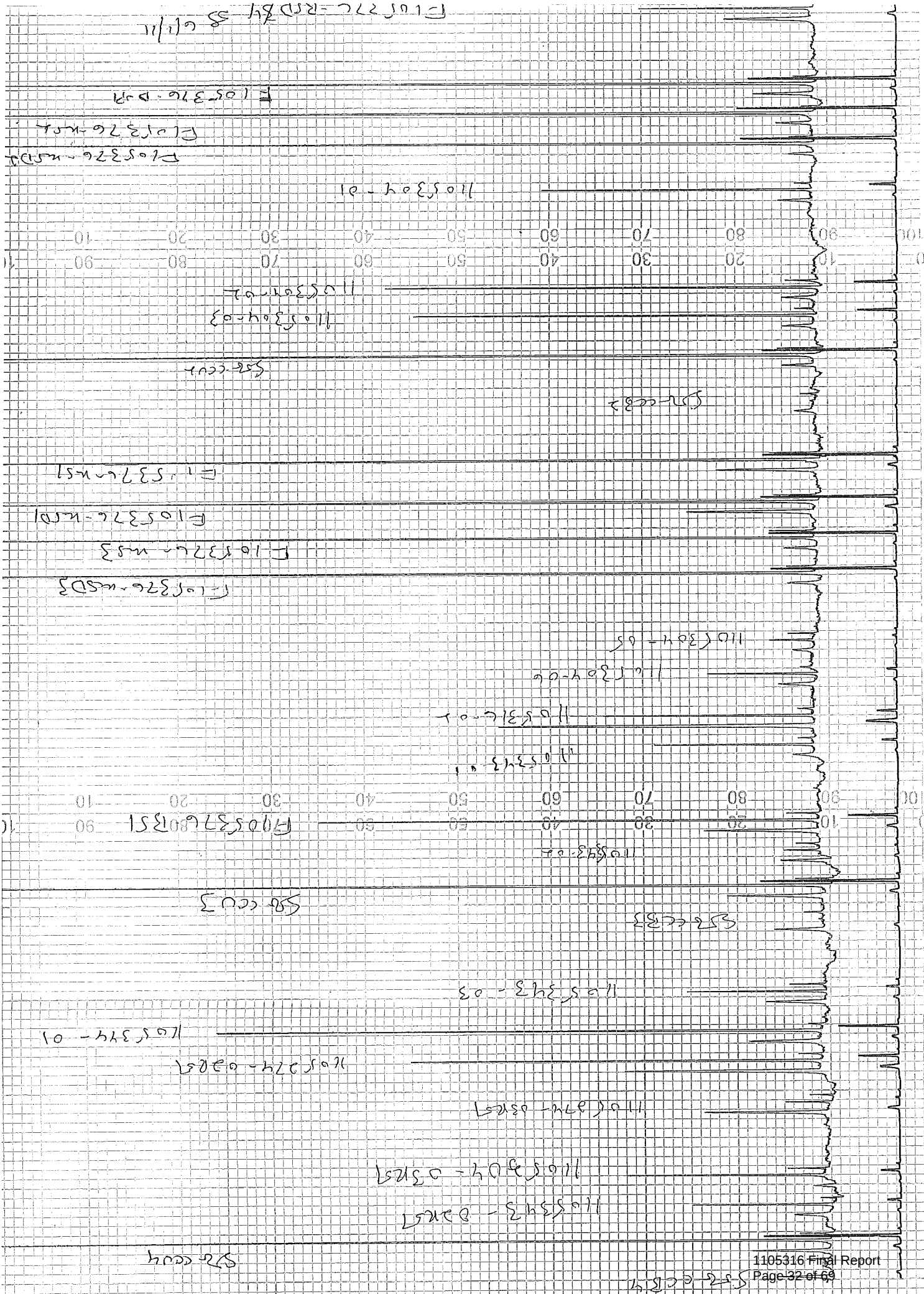
SS-CCB7

SS-CCB3

SS-CCB2

SS-CCB4

10
 10



Analyst:	Liz Siska	Sequence #:	PC 6/7/11 1F01012
Reviewer:	Phayunh Lany	Dataset ID #:	MMHg07-110601-1
Date:	6/1/2011 6/7/11	WO #:	1105274, 1105304, 1105316, 1105343, 1105344
Batch #(s):	F105376	Client(s):	[REDACTED]

• Select the correct preparation method.

Analyte	Prep Method	Matrix	PQL
☐ MHg	FGS-013	MHg Distillation	Water 0.05 ng/L
☐ MHg	FGS-010	KOH/MeOH Digest	Tissue 4 ng/g
☒ MHg	FGS-045	MeCl Extraction	Sed/Soil 0.050 ng/g
☐ DMHg	FGS-098.1 (Not Approved for use in AL lab)	ALL	

	Analyst Initials: <u>LS</u>	Reviewer Initials: <u>PL</u>
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	☒ YES ☐ NO	☒
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	☒ YES ☐ NO	☒
(a) Reviewer: 100% of peak heights checked	☒ YES ☐ NO	☒
(b) Are there peak height errors?	☐ YES ☐ NO	☒
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	☐ YES ☐ NO ☐ N/A	☒
(d) Error on a Cal Pt, IB/CB, or PB: Has the data been reimported?	☐ YES ☐ NO ☐ N/A	☒
(e) Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries).	☒ YES ☐ NO ☐ N/A	☒
(f) Check and compare masses (review prep benchsheet)	☒ YES ☐ NO ☐ N/A	☒
(g) Check and compare initial and final volumes	☒ YES ☐ NO ☐ N/A	☒
(h) Do aliquots and dilutions written on benchsheet match those in Excel?	☒ YES ☐ NO ☐ N/A	☒
(i) Is the sequence #, analyst, date, and instrument # on the QC page?	☒ YES ☐ NO	☒
(j) Is the analysis status correct? (analyzed/initial review/reviewed)	☒ YES ☐ NO	☒
(k) Original prep bench sheet added to data package?	☒ YES ☐ NO	☒
(l) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☒ YES ☐ NO	☒
3. High QA? WO#(s)/Client(s): <u>Lancaster Labs</u>	☒ YES ☐ NO	☒
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☒ YES ☐ NO	☒
(a) Have the QC requirements been met for all WO#s?	☒ YES ☐ NO	☒
5. 20 or fewer samples in batch?	☒ YES ☐ NO	☒
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 1 MS/MSD/MD per batch?	☒ YES ☐ NO	☒
(b) 1 CCV and 1 CCB every 10 analytical runs?	☒ YES ☐ NO	☒
QA/QC Data Checked		
6. R-value ≥ 0.995 (MDN data only)	☐ PASS ☐ FAIL ☒ N/A	☒
Comments: _____		
7. The calibration curve included a minimum of 5 Standards	☒ YES ☐ NO	☒
Comments: _____		
8. 1st Calibration Standard % Recoveries (70-130%)	☒ PASS ☐ FAIL	☒
Comments: _____		
9. RSD CF ($\leq 15\%$)	☒ PASS ☐ FAIL	☒
Comments: _____		
10. ICV % Recoveries 80-120%	☒ PASS ☐ FAIL	☒
Comments: _____		
11. CCV % Recoveries 75-125%	☒ PASS ☐ FAIL	☒
Comments: _____		



Peer Review Check List for MHg for CV-GC-AFS (FGS-070.3)

Analyst:	Liz Siska	Sequence #:	1F01Q12 ¹⁰ 6/27/11
Reviewer:	<i>Phaysh Lann</i>	Dataset ID #:	MMHg07-110601-1
Date:	6/1/2011	WO #:	1105274, 1105304, 1105316, 1105343, 1105344
Batch #(s):	F105376	Client(s):	[REDACTED]

	Analyst Initials:	Reviewer Initials:
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)	☒ PASS ☐ FAIL	☒
Comments:		
13. LCS/LCSD or BS/BSD RPD (< 25%)	☒ PASS ☐ FAIL	☒
Comments:		
14. Are the individual Preparation Blanks < PQL (waters < 0.045ng/L), see method PQL	☒ PASS ☐ FAIL	☒
(a) If not < PQL, note which PB(s) are above control limit:		☒
(b) Is the mean PB < PQL (waters < 0.045ng/L)?	☒ YES ☐ NO	☒
15. Mean of ICB and CCBs < 0.025 ng/L	☒ PASS ☐ FAIL	☒
Comments:		
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES ☐ NO ☒ N/A	☒
17. Is the correct 'Source' designated for MD/MS/MSD?	☒ YES ☐ NO	☒
18. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☒ YES ☐ NO ☐ N/A	☒
19. MD RPD/MT RSD(< 25%)	☒ PASS ☐ FAIL	☒
Comments:		
20. MS/MSD RPD(< 25%)	☒ PASS ☐ FAIL	☒
Comments:		
21. MS (AS) % Recoveries (65-130%)	☒ PASS ☐ FAIL	☒
Comments:		
22. MSD (ASD) % Recoveries (65-130%)	☒ PASS ☐ FAIL	☒
Comments:		
23. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)	☒ YES ☒ NO	☒
24. Are all samples within instrument calibration range (or at maximum aliquot size)?	☒ YES ☐ NO	☒
Comments:		
25. For instrumental dilutions, is the dilution factor in excel correct?	☐ PASS ☐ NO ☒ N/A	☒
Is the sample volume, diluent, and final volume of the dilution noted on benchsheet?	☐ PASS ☐ NO ☒ N/A	☒
26. Dissolved < Total metals (if applicable)	☐ PASS ☐ NO ☒ N/A	☒
Comments:		
27. Effluent < Influent metals (visually confirm if needed)	☐ PASS ☐ NO ☒ N/A	☒
Comments:		
28. Are re-runs noted with reason?	☐ YES ☐ NO ☒ N/A	☒
Comments:		
29. For failing QC (CCV, CCB, PB, BS/BSD, CAL):	☐ YES ☐ NO ☒ N/A	☒
Was a bubbler and trap test run before the analytical run continued?		
Comments:		
30. Do re-run results compare to initial analysis (< 25% RPD)?	☒ YES ☐ NO ☐ N/A	☒
Comments:		
31. Are qualifiers consistent with the data review flowcharts?	☒ YES ☐ NO ☐ N/A	☒
Comments:		
32. Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☐ YES ☐ NO ☒ N/A	☒
Comments:		
33. Have re-extracts been created for non-reportable samples?	☐ YES ☐ NO ☒ N/A	☒
34. Narrations in MMO box in LIMS?		
Comments:		
35. Are there any HIGH QA projects within the data?	☒ YES ☐ NO	
If so, place data package in QA office before scanning.		

Analyst:	Liz Siska	Sequence #:	1F01012 ¹⁰ PC 6/9/11
Reviewer:	Phyllis Lang	Dataset ID #:	MMHg15-110601-1
Date:	6/1/2011	WO #:	1105260 1105274 1105276 1105316 1105331
Batch #(s):	F105371	Client(s):	

36 Additional Comments:

Analyst Initials: LS

Reviewer Initials: PC
✓

BS failed + b test performed + also failed. Original vial from extractor was re-purged + ran + passed OS 6/1/11

Corrections

- LTMS → mark samples non-reportable for samples not being reported.
- CCV4 is in red.
- missing sequence pages. (1F01010)

✓ OT
6/1/11

ANALYSIS SEQUENCE

1F01010

Instrument: Hg-07

Calibration ID: UNASSIGNED

Analyzed: 6/1/2011

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments
1F01010-CAL1	QC	1	1100528			
1F01010-CAL2	QC	2	1100529			
1F01010-CAL3	QC	3	1100530			
1F01010-CAL4	QC	4	1100531			
1F01010-CAL5	QC	5	1100532			
1F01010-ICV1	QC	6	1101212			
1F01010-ICB1	QC	7				
F105376-BLK1	QC	8				
F105376-BLK2	QC	9				
F105376-BLK3	QC	10				
F105376-BS2	QC	11				
F105376-BSD1	QC	12				
1105274-01	MHg-CVAFS-S-MeClExt	13				
1105304-04	MHg-CVAFS-S-MeClExt	14				
1105316-01	MHg-CVAFS-S-MeClExt	15			Lancaster Labs, Inc.	
1105274-02	MHg-CVAFS-S-MeClExt	16				
1105274-03	MHg-CVAFS-S-MeClExt	17				
1F01010-CCV1	QC	18	1100530			
1F01010-CCB1	QC	19				
1105274-01RE1	MHg-CVAFS-S-MeClExt	20				
1105316-01RE1	MHg-CVAFS-S-MeClExt	21			Lancaster Labs, Inc.	

Samples Loaded By

6/1/11
Date

Data Processed By

6/1/11
Date

Due Date: 6/3/2011

1F01010

Calibration ID: UNASSIGNED

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments
F105376-BS3	QC	22				
F105376-BS4	QC	23				
F105376-DUP1	QC	24				
F105376-MS2	QC	25				
F105376-MSD2	QC	26				
1105304-01	MHg-CVAFS-S-MeClExt	27				
1105304-02	MHg-CVAFS-S-MeClExt	28				
1105304-03	MHg-CVAFS-S-MeClExt	29				
1F01010-CCV2	QC	30	1100530			
1F01010-CCB2	QC	31				
F105376-MS1	QC	32				
F105376-MSD1	QC	33				
F105376-MS3	QC	34				
F105376-MSD3	QC	35				
1105304-05	MHg-CVAFS-S-MeClExt	36				
1105304-06	MHg-CVAFS-S-MeClExt	37				
1105316-02	MHg-CVAFS-S-MeClExt	38			Lancaster Labs, Inc.	
1105343-01	MHg-CVAFS-S-MeClExt	39				
F105376-BS1	QC	40				
1105343-02	MHg-CVAFS-S-MeClExt	41				
1F01010-CCV3	QC	42	1100530			

Samples Loaded By LS Date 6/18/11

5
Data Processed By _____ Date 6/19/4

1105316 Final Report
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ANALYSIS SEQUENCE

1F01010

Instrument: Hg-07

Calibration ID: UNASSIGNED

Analyzed: 6/1/2011

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments
1F01010-CCB3	QC	43				
1105343-03	MHg-CVAFS-S-MeClExt	44				
1105344-01	MHg-CVAFS-S-MeClExt	45				
1105274-02RE1	MHg-CVAFS-S-MeClExt	46				
1105274-03RE1	MHg-CVAFS-S-MeClExt	47				
1105304-05RE1	MHg-CVAFS-S-MeClExt	48				Added 6/1/2011 by LS
1105343-02RE1	MHg-CVAFS-S-MeClExt	49				Added 6/1/2011 by LS
1F01010-CCV4	QC	50	1100530			
1F01010-CCB4	QC	51				

Samples Loaded By_____
Date_____
Data Processed By_____
Date

Due Date: 6/3/2011

PREPARATION BENCH SHEET

F105376

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Hg Aquatic/Solids - Methylene Chloride Extraction for Methyl Hg

Prepared: 5/30/2011

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F105376-BLK1	Blank	0.5	288					
F105376-BLK2	Blank	0.5	288					
F105376-BLK3	Blank	0.5	288					
F105376-BS1	IAEA-405	0.2	288	0800436	200			
F105376-BS2	IAEA-405	0.2	288	0800436	200			Added 6/1/2011 by LS
F105376-BS3	IAEA-405	0.2	288	0800436	200			Added 6/1/2011 by LS
F105376-BS4	IAEA-405	0.2	288	0800436	200			Added 6/1/2011 by LS
F105376-BSD1	IAEA-405 Dup	0.2	288	0800436	200			
F105376-DUP1	Duplicate [1105304-01]	0.514	288					
F105376-MS1	Matrix Spike [1105274-01]	0.526	288	1001914	25			
F105376-MS2	Matrix Spike [1105304-04]	0.532	288	1001914	25			
F105376-MS3	Matrix Spike [1105316-01]	0.519	288	1001914	25			
F105376-MSD1	Matrix Spike Dup [1105274-01]	0.518	288	1001914	25			
F105376-MSD2	Matrix Spike Dup [1105304-04]	0.527	288	1001914	25			
F105376-MSD3	Matrix Spike Dup [1105316-01]	0.515	288	1001914	25			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
0800436	IAEA-405	27-Mar-12 00:00	1100142	Fisher Methylene Chloride	26-Jan-14 00:00
1001914	MHg New Primary 100 ng/mL spike	20-Dec-11 00:00	1100678	Acetate Buffer	26-Sep-11 00:00
			1101082	Acid Bromide	30-Jun-11 00:00
			1101185	CuSO4	19-Nov-11 00:00
			1101250	Ethylating Agent (For Methyl Mercury Analysis)	23-Nov-11 00:00

Due Date: 6/3/2011

PREPARATION BENCH SHEET

F105376

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Hg Aquatic/Solids - Methylene Chloride Extraction for Methyl Hg

Prepared: 5/30/2011

Lab Number	Sample ID	Initial (g)	Final (mL)	Sample Comments	Analysis Comments
1105274-01		0.528	288	MS/MSD	
1105274-01RE1		0.528	288	MS/MSD	Added 6/1/2011 by LS
1105274-02		0.509	288		
1105274-02RE1		0.509	288		Added 6/1/2011 by LS
1105274-03		0.523	288		
1105274-03RE1		0.523	288		Added 6/1/2011 by LS
1105304-01		0.53	288		EDD Required
1105304-02		0.525	288		EDD Required
1105304-03		0.508	288		EDD Required
1105304-04		0.532	288	MS/MSD requested on this sample	EDD Required
1105304-05		0.512	288		EDD Required
1105304-06		0.532	288		EDD Required
1105316-01	6296495 SED-035-SIV-SD Grab	0.517	288	MS/MSD	High QA
1105316-01RE1	6296495 SED-035-SIV-SD Grab	0.517	288	MS/MSD	High QA, Added 6/1/2011 by LS
1105316-02	6296496 DUP01-SIV-SD Grab	0.522	288		High QA
1105343-01		0.526	288		EDD Required
1105343-02		0.52	288		EDD Required
1105343-03		0.533	288		EDD Required
1105344-01		0.536	288		EDD Required

Due Date: 6/3/2011

20min

Name: Dwyer Date: 5/30/11 Time in: _____ Target Temp: 45
 WO# and Client Name: 1105274, 1105304, 1105316 Time out: _____ Actual Temp: 45.3
 Sample Matrix: ☒ Sediments ☐ Waters ☐ Tissues ☐ FSTM Traps ☐ Filters ☐ Other _____
 Analysis: ☐ Total Hg ☒ Methyl Hg ☐ Other Methylene chloride extraction
 Digestion Method: ☐ Oven ☐ Hot Plate Vial Type: ☐ Glass ☒ Teflon Final volume: 288
 Reagent/LIMS ID: Acid Bromide Cusoy Brought up to Vol. w/LIMS ID: n/a
1101082, 1101185, 1100142

Vial #	Sample ID Number	Sample Size ☐ ml ☒ g	Comments
			100ug/ml
1	F105376 Blank1	0.525	Spike ID: <u>1101014</u>
2	F105376 Blank2	0.499	Spike Amount: <u>25ul</u>
3	F105376 Blank3	0.529	Pipette Serial Number: <u>CT17087</u>
4	F105376 INH405 BS1 0866436	0.200	
5	F105376 ZAG405 BS1	0.200	
6	110530401 MD	0.514	
7	110527401 MS1	0.526	
8	110527401 MSD1	0.518	
9	110530404 MS2	0.532	
10	110530404 MSD2	0.527	
11	110531601 MS3	0.519	
12	110531601 MSR3	0.515	
13	1105274-01	0.528	
14	1105274-02	0.509	
15	1105274-03	0.523	
16	110530401	0.530	
17	1105304-02	0.525	
18	1105304-03	0.508	0.508 g
19	1105304-04	0.532	
20	1105304-05	0.512	
21	1105304-06	0.532	
22	110531601	0.517	
23	110531602	0.522	
24	1105343-01	0.526	
25	1105343-02	0.520	
26	1105343-03	0.533	
27	110534401	0.536	
28			
29			
30			5-31-11

PREPARATION BENCH SHEET

F105376

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Hg Aquatic/Solids - Methylene Chloride Extraction for Methyl Hg

Prepared: 5/30/2011

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F105376-BLK1	Blank	0.5	288					57.6
F105376-BLK2	Blank	0.5	288					57.6
F105376-BLK3	Blank	0.5	288					57.6
F105376-BS1	IAEA-405	0.2	288	0800436	200			10.710.710 10.710.710
F105376-BSD1	IAEA-405 Dup	0.2	288	0800436	200			10
F105376-DUP1	Duplicate [1105274-01]	0.514	288					56.111 47.6
F105376-MS1	Matrix Spike [1105274-01]	0.526	288	1001914	25			10
F105376-MS2	Matrix Spike [1105304-04]	0.532	288	1001914	25			10
F105376-MS3	Matrix Spike [1105316-01]	0.519	288	1001914	25			10
F105376-MSD1	Matrix Spike Dup [1105274-01]	0.518	288	1001914	25			10
F105376-MSD2	Matrix Spike Dup [1105304-04]	0.527	288	1001914	25			10
F105376-MSD3	Matrix Spike Dup [1105316-01]	0.515	288	1001914	25			10

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
0800436	IAEA-405	27-Mar-12 00:00	1100142	Fisher Methylene Chloride	26-Jan-14 00:00
1001914	MHg New Primary 100 ng/mL spike	20-Dec-11 00:00	1101082	Acid Bromide	30-Jun-11 00:00
			1101185	CuSO4	19-Nov-11 00:00

Due Date: 6/1/2011

PREPARATION BENCH SHEET

F105376

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: Hg Aquatic/Solids - Methylene Chloride Extraction for Methyl Hg

Prepared: 5/30/2011

Lab Number	Sample ID	Initial (g)	Final (mL)	Sample Comments	Analysis Comments
1105274-01		0.528	288	MS/MSD 10 → 47.4	
1105274-02		0.509	288	10	
1105274-03		0.523	288	10	
1105304-01		0.53	288	10	EDD Required
1105304-02		0.525	288	10	EDD Required
1105304-03		0.508	288	10 → 47.4	EDD Required
1105304-04		0.532	288	MS/MSD requested on this sample 52.0	EDD Required
1105304-05		0.512	288	10 → 47.6	EDD Required
1105304-06		0.532	288	10	EDD Required
1105316-01	6296495 SED-035-SIV-SD Grab	0.517	288	MS/MSD 10 → 47.6	High QA
1105316-02	6296496 DUP01-SIV-SD Grab	0.522	288	52.4	High QA
1105343-01		0.526	288	10	EDD Required
1105343-02		0.52	288	10 → 47.6	EDD Required
1105343-03		0.533	288	20	EDD Required
1105344-01		0.536	288	20	EDD Required

Work Order

Client

Project

1105274

1105304

1105316

1105343

1105344

Lancaster Labs, Inc.

Methyl Mercury Analysis

Due Date: 6/1/2011

Frontier Global Sciences, Inc
High QA Report: MHg CV AFS
Analyst: Adela Blaga
Sequence: 1F01012 (MHg15-110601-1), Batch F105371
Reviewer: Lucas Knowles
Reviewed Date: 6/9/2011

6/10/11 LMK

Client(s): Lancaster Labs (WO# 1105316)

Client specific QC: See WO.

- (1) Calibration was performed on at least five calibration standards.
 - o There were five standards analyzed for the calibration curve and all five points were included in the curve.
 - o For the low calibration standard, 0.05 ng, recovery was 98.4%.
- (2) The calibration curve used at least five standards and achieved an RSD CF $\leq 15\%$.
 - o Yes: 2.2%
- (3) All LCS have %Rec within 70-130%.
 - o F105371-BS1/BSD1 (MHg New Primary 1.0 ng/mL, LIMS# 1100487) were analyzed with recoveries of 106% and 112%.
- (4) LCS/CRM RPD < 25%.
 - o The RPD between BS1 and BSD1 was 5.47%.
- (5) All sample MS and MSD have %Rec within 65-130% unless spike concentration is less than 1x the ambient concentration.
 - o F105371-MS1 and MSD1 were analyzed on 1105274-07, and the recoveries were 114% and 112% with an RPD of 2.01%.
- (6) All ICB & CCB < 0.025 ng/L
 - o Yes: 0.002 ± 0.000
- (7) PB < PQL (0.05 ng/L)
 - o Prep blank frequency: Three preparation blanks were analyzed, and all results were below the PQL. The mean of the three blanks was 0.008 ng/L.
- (8) MD RPD/MT RSD < 25%.
 - o F105371-DUP1: Sample 1105274-07 was analyzed in duplicate. RPD was 40.7% and was qualified with QR-07.

QR-07: The RPD/RSD value for the matrix duplicate/triplicate was outside of acceptance limits. Batch QC acceptable based on MS/MSD and/or LCS/LCSD RPD values within control limits.
- (9) MS/MSD RPD < 25%.
 - o In control, see 5.
- (10) ICV (80-120%) and CCVs (75-125%) % recoveries are within control limits.
 - o One ICV and three CCVs were run at a 2.000 ng/L concentration. Recovery results were 87.1%, 106%, 101% and 94.9%.
- (11) All reported samples are within standard calibration range.
 - o All samples on WO 1105316 were within calibration range or analyzed at the maximum aliquot size.

-Peer Reviewer checked transcriptions and calculations.

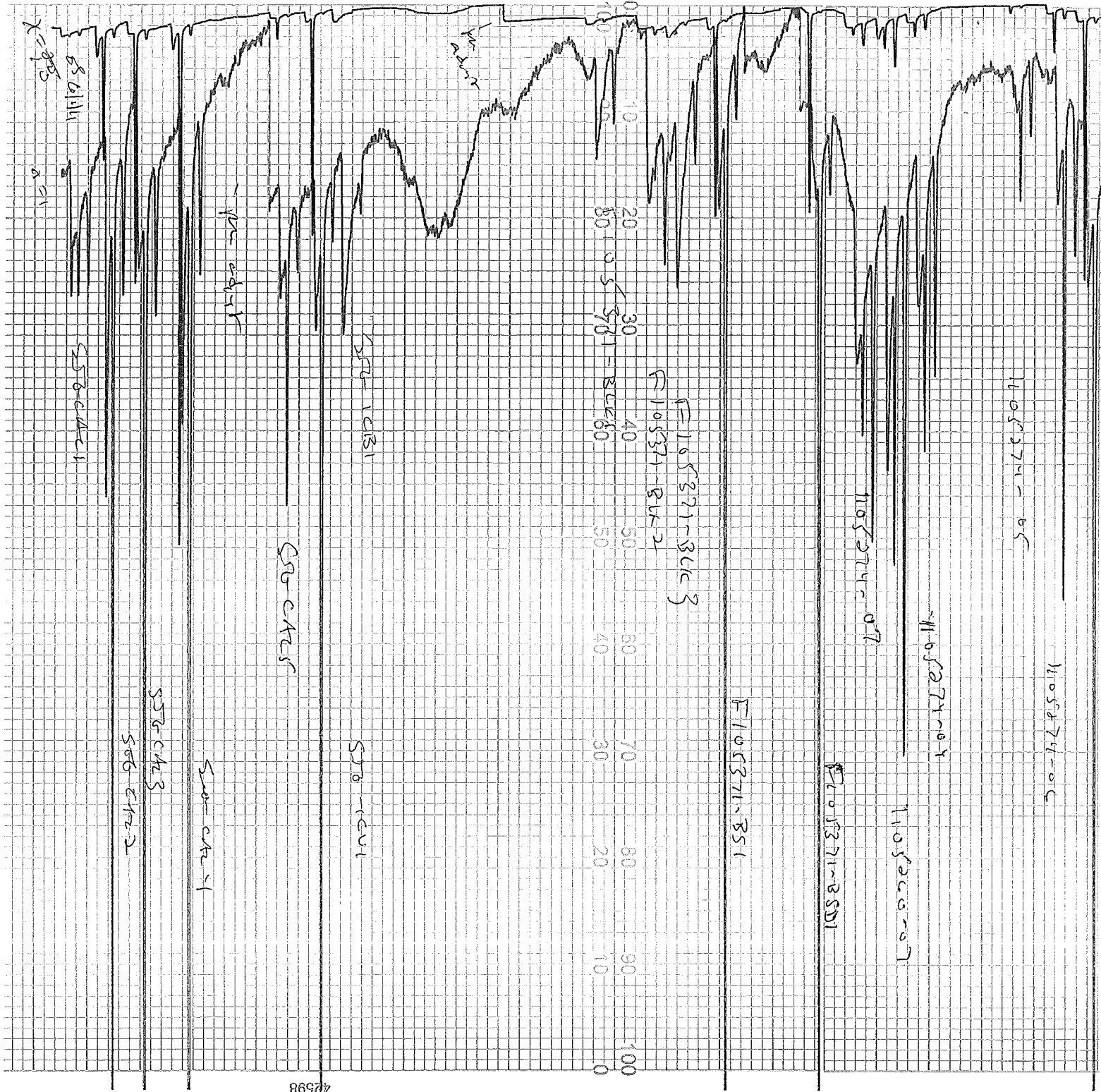
Follow-up items:

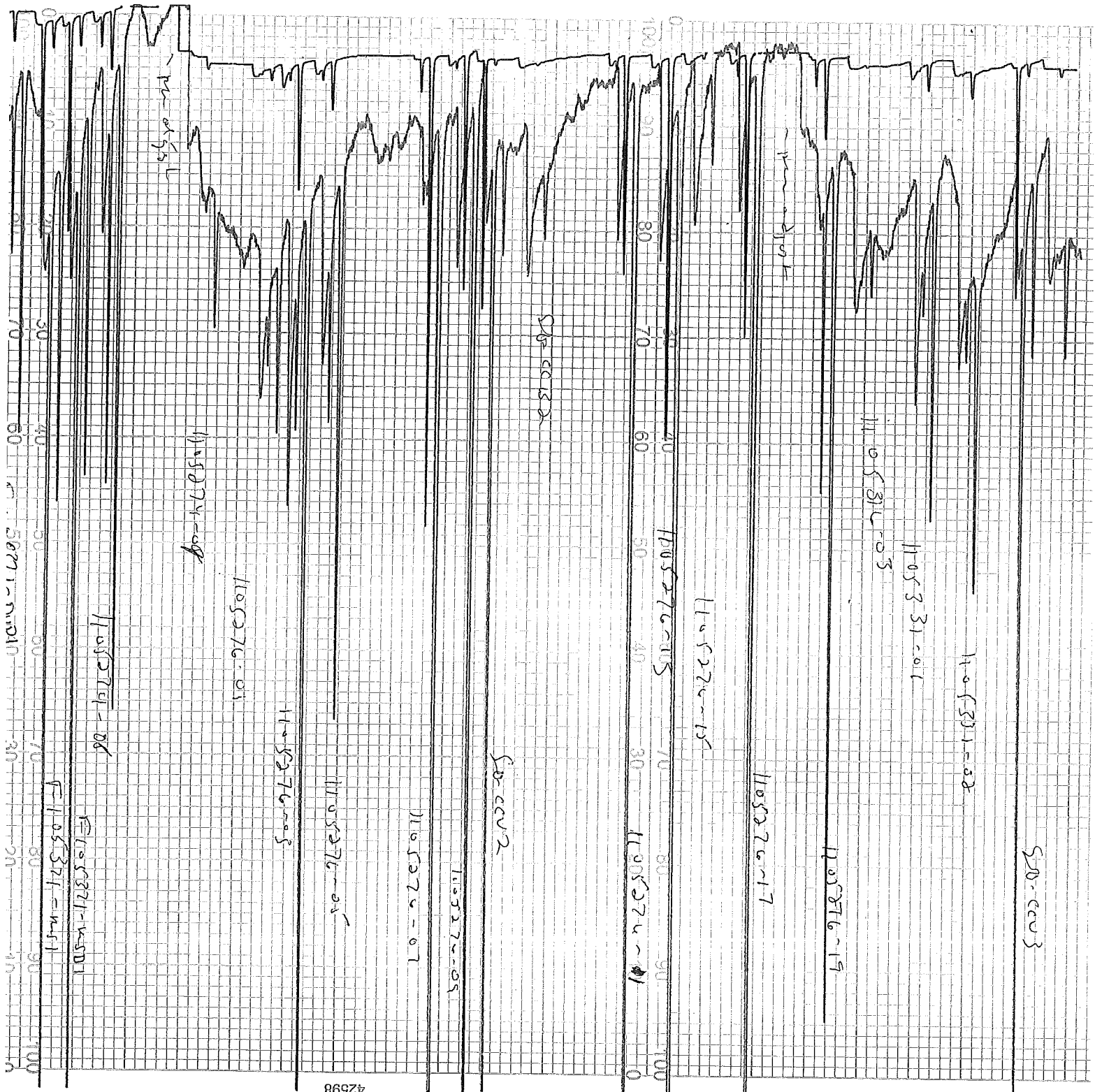
Frontier Global Sciences, Inc
High QA Report: MHg CV AFS
Analyst: Adela Blaga
Sequence: 1F01012 (MHg15-110601-1), Batch F105371
Reviewer: Lucas Knowles
Reviewed Date: 6/9/2011

Email correspondence among the QA coordinator, lab manager, AL group leader, and PM group leader detailing qualifications or corrective actions may be appended to this report.

All analytical issues or other problems:

- None.





42598

Frontier GeoSciences, Inc.

Analysis Datasheet for Methyl Mercury in Waters

Date of Analysis: 6/1/11

Instrument #: Hg-15

LIMS Sequence #: 1F01012

Analyst: LS

Units ng/L

Time Begin: 10:01

Time End: 17:03

Sample Count: 41

Calibration Statistics:

LabNumber	n	True Val	Peak Height or Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	5.95 units	119.00	5.70 units	114.00	98.4 %Rec
SEQ-CAL2	1	1.00 ng/L	115.00 units	115.00	114.75 units	114.75	99.1 %Rec
SEQ-CAL3	1	2.00 ng/L	234.00 units	117.00	233.75 units	116.88	100.9 %Rec
SEQ-CAL4	1	4.00 ng/L	479.00 units	119.75	478.75 units	119.69	103.3 %Rec
SEQ-CAL5	1	0.20 ng/L	23.00 units	115.00	22.75 units	113.75	98.2 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						
Corr. Mean RF	Corr. St Dev RF	Corr. RSD CF	Uncorr. Mean RF	Eff Factor			
115.81	+/- 2.49	2.2% RSD	117.15	0.8046			

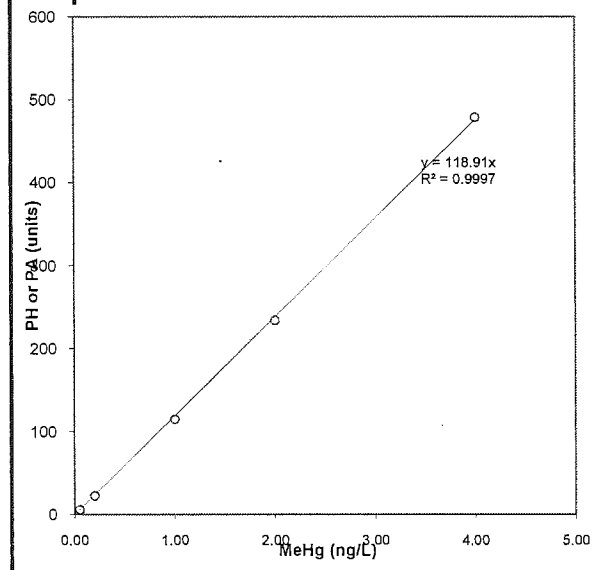
Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-ICB					
SEQ-CCB					
SEQ-IBL	4	0.25 units	±0.06	0.002 ng/L	±0.000

Preparation Blanks

Sample Type	Group ID	n	Mean	Std Dev
BLK	1	3	0.003 ng/L	±0.008
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

Response Factor



QUALITY ASSURANCE REVIEWED

INITIALS: LYMK 6/10/11QUALITY ASSURANCE
PEER-REVIEWEDINITIALS: PL 6/10/11

FileID	Instrument	Analyst	Analyzed	Tp	Bub	Sample Type	LabNumber	Aliquot Volume	Instrumental Conc.	Group ID	No PB Correction?	Uncorrected PH	Instrumental Dilution	RESP	Dilution	InitialResult	FinalResult	InitialUnits	Comments
1501	Hq-15	LS	6/1/11 10:01	1	1	CAL	SEQ-CAL1	50.000 mL	0.002 ng			6.0		5.7	1.00	0.049	0.049	ng/L	
1502	Hq-15	LS	6/1/11 10:11	2	2	CAL	SEQ-CAL2	50.000 mL	0.050 ng			115.0		114.8	1.00	0.991	0.991	ng/L	
1503	Hq-15	LS	6/1/11 10:21	3	3	CAL	SEQ-CAL3	50.000 mL	0.101 ng			234.0		233.8	1.00	2.018	2.018	ng/L	
1504	Hq-15	LS	6/1/11 10:31	4	4	CAL	SEQ-CAL4	50.000 mL	0.207 ng			479.0		478.8	1.00	4.134	4.134	ng/L	
1505	Hq-15	LS	6/1/11 10:42	6	1	CAL	SEQ-CAL5	50.000 mL	0.010 ng			23.0		22.8	1.00	0.196	0.196	ng/L	
1506	Hq-15	LS	6/1/11 10:52	8	2	CAL	SEQ-ICV1	50.000 mL	0.087 ng			202.0		201.8	1.00	1.742	1.742	ng/L	87.1 %Rec
1507	Hq-15	LS	6/1/11 11:02	1	3	CAL	SEQ-ICB1	50.000 mL	0.000 ng			0.2		-0.1	1.00	0.000	0.000	ng/L	
1508	Hq-15	LS	6/1/11 11:13	2	1	BLK	F105371-BLK1	40.000 mL	0.000 ng	1		0.1		-0.2	1.25	-0.002	-0.002	ng/L	
1509	Hq-15	LS	6/1/11 11:23	3	2	BLK	F105371-BLK2	40.000 mL	0.000 ng	1		0.6		0.4	1.25	0.004	0.005	ng/L	
1510	Hq-15	LS	6/1/11 11:33	4	3	BLK	F105371-BLK3	40.000 mL	0.000 ng	1		0.2		-0.1	1.25	-0.001	-0.001	ng/L	
1511	Hq-15	LS	6/1/11 11:43	6	4	SAM	F105371-BS1	40.000 mL	0.077 ng	1		178.0		177.8	1.25	1.907	2.384	ng/L	105.9 %Rec
1512	Hq-15	LS	6/1/11 11:54	8	1	SAM	F105371-BS01	40.000 mL	0.081 ng	1		188.0		187.8	1.25	2.014	2.518	ng/L	111.9 %Rec
1513	Hq-15	LS	6/1/11 12:04	1	2	SAM	1105274-07	40.000 mL	0.004 ng	1		9.5		9.3	1.25	0.099	0.123	ng/L	
1514	Hq-15	LS	6/1/11 12:14	2	3	SAM	1105260-07	40.000 mL	0.011 ng	1		25.3		25.0	1.25	0.268	0.335	ng/L	
1515	Hq-15	LS	6/1/11 12:25	3	4	SAM	1105274-04	40.000 mL	0.008 ng	1		18.4		18.2	1.25	0.194	0.243	ng/L	
1516	Hq-15	LS	6/1/11 12:35	4	1	SAM	1105274-05	40.000 mL	0.004 ng	1		9.4		9.2	1.25	0.098	0.122	ng/L	-5.4 %Rec
1517	Hq-15	LS	6/1/11 12:45	6	2	SAM	1105274-06	40.000 mL	0.018 ng	1		42.2		42.0	1.25	0.450	0.562	ng/L	14.2 %Rec
1518	Hq-15	LS	6/1/11 12:55	8	3	CAL	SEQ-CCV1	50.000 mL	0.106 ng			245.0		244.8	1.00	2.113	2.113	ng/L	105.7 %Rec
1519	Hq-15	LS	6/1/11 13:06	1	4	CAL	SEQ-CCB1	50.000 mL	0.000 ng			0.3		0.1	1.00	0.000	0.000	ng/L	
1520	Hq-15	LS	6/1/11 13:16	2	1	SAM	F105371-DUP1	40.000 mL	0.006 ng	1		14.2		14.0	1.25	0.149	0.186	ng/L	
1521	Hq-15	LS	6/1/11 13:26	3	2	SAM	F105371-MS1	40.000 mL	0.087 ng	1		201.0		200.8	1.25	2.154	2.692	ng/L	113.6 %Rec
1522	Hq-15	LS	6/1/11 13:37	4	3	SAM	F105371-MSD1	40.000 mL	0.085 ng	1		197.0		196.8	1.25	2.111	2.639	ng/L	
1523	Hq-15	LS	6/1/11 13:47	6	4	SAM	1105274-08	40.000 mL	0.014 ng	1		33.0		32.8	1.25	0.351	0.439	ng/L	
1524	Hq-15	LS	6/1/11 13:57	8	1	SAM	1105274-09	40.000 mL	0.000 ng	1		0.5		0.3	1.25	0.002	0.003	ng/L	
1525	Hq-15	LS	6/1/11 14:08	1	2	SAM	1105276-01	40.000 mL	0.002 ng	1		4.8		4.6	1.25	0.048	0.060	ng/L	
1526	Hq-15	LS	6/1/11 14:18	2	3	SAM	1105276-03	40.000 mL	0.005 ng	1		12.4		12.2	1.25	0.130	0.162	ng/L	
1527	Hq-15	LS	6/1/11 14:28	3	4	SAM	1105276-05	40.000 mL	0.006 ng	1		14.2		13.9	1.25	0.149	0.186	ng/L	
1528	Hq-15	LS	6/1/11 14:38	4	1	SAM	1105276-07	40.000 mL	0.014 ng	1		33.0		32.8	1.25	0.351	0.439	ng/L	
1529	Hq-15	LS	6/1/11 14:49	6	2	SAM	1105276-09	40.000 mL	0.005 ng	1		11.5		11.3	1.25	0.120	0.150	ng/L	
1530	Hq-15	LS	6/1/11 14:59	8	3	CAL	SEQ-CCV2	50.000 mL	0.101 ng			235.0		234.8	1.00	2.027	2.027	ng/L	101.3 %Rec
1531	Hq-15	LS	6/1/11 15:09	1	4	CAL	SEQ-CCB2	50.000 mL	0.000 ng			0.2		-0.1	1.00	0.000	0.000	ng/L	
1532	Hq-15	LS	6/1/11 15:20	2	1	SAM	1105276-11	40.000 mL	0.005 ng	1		12.7		12.5	1.25	0.133	0.166	ng/L	
1533	Hq-15	LS	6/1/11 15:30	3	2	SAM	1105276-13	40.000 mL	0.011 ng	1		25.1		24.9	1.25	0.266	0.333	ng/L	
1534	Hq-15	LS	6/1/11 15:40	4	3	SAM	1105276-15	40.000 mL	0.000 ng	1		0.3		0.1	1.25	0.000	0.000	ng/L	
1535	Hq-15	LS	6/1/11 15:50	6	4	SAM	1105276-17	40.000 mL	0.009 ng	1		20.5		20.3	1.25	0.217	0.271	ng/L	
1536	Hq-15	LS	6/1/11 16:01	1	1	SAM	1105276-19	40.000 mL	0.011 ng	1		26.5		26.3	1.25	0.281	0.351	ng/L	
1537	Hq-15	LS	6/1/11 16:11	8	2	SAM	1105316-03	40.000 mL	0.000 ng	1		0.4		0.2	1.25	0.001	0.001	ng/L	
1538	Hq-15	LS	6/1/11 16:21	2	3	SAM	1105331-01	40.000 mL	0.002 ng	1		4.4		4.2	1.25	0.044	0.055	ng/L	
1539	Hq-15	LS	6/1/11 16:32	3	4	SAM	1105331-02	40.000 mL	0.002 ng	1		6.0		5.8	1.25	0.061	0.076	ng/L	
1540	Hq-15	LS	6/1/11 16:42	4	1	CAL	SEQ-CCV3	50.000 mL	0.095 ng			220.0		219.8	1.00	1.897	1.897	ng/L	94.9 %Rec
1541	Hq-15	LS	6/1/11 16:52	6	2	CAL	SEQ-CCB3	50.000 mL	0.000 ng			0.3		0.1	1.00	0.000	0.000	ng/L	

ANALYSIS SEQUENCE

1F01012

Instrument: Hg-15

Calibration ID: UNASSIGNED

Analyzed: 6/1/2011

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments
1F01012-CAL1	QC	1	1100528			
1F01012-CAL2	QC	2	1100529			
1F01012-CAL3	QC	3	1100530			
1F01012-CAL4	QC	4	1100531			
1F01012-CAL5	QC	5	1100532			
1F01012-ICV1	QC	6	1101212			
1F01012-ICB1	QC	7				
F105371-BLK1	QC	8				
F105371-BLK2	QC	9				
F105371-BLK3	QC	10				
F105371-BS1	QC	11				
F105371-BSD1	QC	12				
1105274-07	MHg-CVAFS-W-Dist	13				
1105260-07	MHg-CVAFS-W-Dist	14				
1105274-04	MHg-CVAFS-W-Dist	15				
1105274-05	MHg-CVAFS-W-Dist	16				
1105274-06	MHg-CVAFS-W-Dist	17				
1F01012-CCV1	QC	18	1100530			
1F01012-CCB1	QC	19				
F105371-DUP1	QC	20				
F105371-MS1	QC	21				

Samples Loaded By

Date

Data Processed By

Date

Due Date: 6/6/2011

ANALYSIS SEQUENCE

1F01012

Instrument: Hg-15

Calibration ID: UNASSIGNED

Analyzed: 6/1/2011

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments
F105371-MSD1	QC	22				
1105274-08	MHg-CVAFS-W-Dist	23				
1105274-09	MHg-CVAFS-W-Dist	24				
1105276-01	MHg-CVAFS-W-Dist	25				
1105276-03	MHg-CVAFS-W-Dist	26				
1105276-05	MHg-CVAFS-W-Dist	27				
1105276-07	MHg-CVAFS-W-Dist	28				
1105276-09	MHg-CVAFS-W-Dist	29				
1F01012-CCV2	QC	30	1100530			
1F01012-CCB2	QC	31				
1105276-11	MHg-CVAFS-W-Dist	32				
1105276-13	MHg-CVAFS-W-Dist	33				
1105276-15	MHg-CVAFS-W-Dist	34				
1105276-17	MHg-CVAFS-W-Dist	35				
1105276-19	MHg-CVAFS-W-Dist	36				
1105316-03	MHg-CVAFS-W-Dist	37			Lancaster Labs, Inc.	
1105331-01	MHg-CVAFS-W-Dist	38				
1105331-02	MHg-CVAFS-W-Dist	39				
1F01012-CCV3	QC	40	1100530			
1F01012-CCB3	QC	41				

Samples Loaded By

Date

Data Processed By

Date

Due Date: 6/6/2011

1F01012

Analyzed: 6/1/2011

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments

Data Processed By E Date 4/1/01

Page 3 of 3
1105316 Final Report
Page 52 of 69

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water

Prepared: 5/30/2011

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F105371-BLK1	Blank	45	40					
F105371-BLK2	Blank	45	40					
F105371-BLK3	Blank	45	40					
F105371-BS1	Blank Spike	45	40	1100487	90			
F105371-BSD1	Blank Spike Dup	45	40	1100487	90			
F105371-DUP1	Duplicate [1105274-07]	45	40					
F105371-MS1	Matrix Spike [1105274-07]	45	40	1100487	90			
F105371-MSD1	Matrix Spike Dup [1105274-07]	45	40	1100487	90			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
1100487	MHg New Primary 1.0 ng/mL CAL	17-Jun-11 00:00	1100549	Omnitrace Hydrochloric Acid	23-Mar-14 00:00
			1100678	Acetate Buffer	26-Sep-11 00:00
			1101116	APDC	13-Nov-11 00:00
			1101250	Ethylating Agent (For Methyl Mercury Analysis)	23-Nov-11 00:00

Due Date: 6/6/2011

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water

Prepared: 5/30/2011

Lab Number	Sample ID	Initial (mL)	Final (mL)	Sample Comments	Analysis Comments
1105260-07		45	40		
1105274-04		45	40		
1105274-05		45	40		
1105274-06		45	40		
1105274-07		45	40	MS/MSD	
1105274-08		45	40		
1105274-09		45	40		
1105276-01		45	40		
1105276-03		45	40		
1105276-05		45	40		
1105276-07		45	40		
1105276-09		45	40		
1105276-11		45	40		
1105276-13		45	40		
1105276-15		45	40		
1105276-17		45	40		
1105276-19		45	40		
1105316-03	FB08-SIV-052311	45	40		High QA
1105331-01		45	40		
1105331-02		45	40		

Due Date: 6/6/2011

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water

Prepared: 5/30/2011

<u>Work Order</u>	<u>Client</u>	<u>Project</u>
1105260		
1105274		
1105276		
1105316	Lancaster Labs, Inc.	Methyl Mercury Analysis
1105331		

Due Date: 6/6/2011

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water

Prepared: 5/30/2011

Lab Number	Sample ID	Initial (mL)	Final (mL)	Sample Comments	Analysis Comments
1 1105260-07		45	40		
2 1105274-04		45	40		
3 1105274-05		45	40		
4 1105274-06		45	40		
5 1105274-07		45	40	MS/MSD	
6 1105274-08		45	40		
7 1105274-09		45	40		
8 1105276-01		45	40		
9 1105276-03		45	40		
10 1105276-05		45	40		
11 1105276-07		45	40		
12 1105276-09		45	40		
13 1105276-11		45	40		
14 1105276-13		45	40		
15 1105276-15		45	40		
16 1105276-17		45	40		
17 1105276-19		45	40		
18 1105316-03	6296497 FB-07-SIV-SS-052311	45	40		High QA
19 1105331-01		45	40		
20 1105331-02		45	40		

Due Date: 6/6/2011

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water

Prepared: 5/30/2011

Work Order

Client

Project

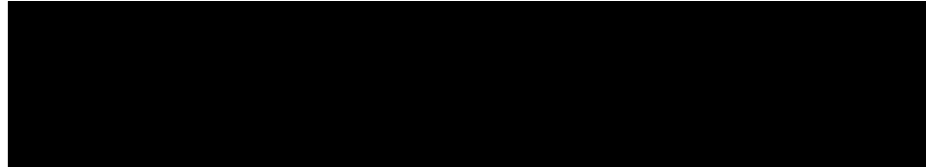
1105260

1105274

1105276

1105316

1105331



Due Date: 6/6/2011

Sample Digestion Log

Name: D. Allen

Date: 5/30/2011

Analysis: Methyl Hg

WO#: 110526, 110527, 110528

Batch #: F105371

Sample Matrix: Water

Digest #	Sample ID Number	Sample Size (ml)	pH (≥ 3)	
Blank 1	F105371 Blank 1	45	3.5	Spike ID: <u>1100487</u> Spike Amount: <u>90ul</u> Balance #: <u>2</u> Pipette #: <u>CH86806</u> APDC ID: <u>1101116</u> HCl ID: <u>1100549</u>
Blank 2	F105371 Blank 2	45	3.3	
Blank 3	F105371 Blank 3	45	3.3	
BS	F105371 BS	45	3.5	
BSD	F105371 BSD	45	3.5	
1	1105260-07	45	3.5	Temperature: (No set range as the temp. may be changed to keep flow rate of ≥ 10 ml per hour. Temperature is recorded for informational purposes only.) Unit 1: <u>120.8</u> Unit 2: <u>120.6</u> Unit 3: <u>120.3</u> Unit 4: <u>120.8</u> Unit 5: <u>120.5</u> Unit 6: <u>121.4</u> Comments: <u>5-30-11</u>
2	1105274-01	45	3.7	
3	1105274-05	45	3.5	
4	1105274-06	45	3.5	
5	1105274-07	45	3.5	
5 dup	1105274-07 dup	45	3.5	
5 Hf	1105274-07 Hf	45	3.5	
5 MSD	1105274-07 MSD	45	3.5	
6	1105274-08	45	3.7	
7	1105274-09	45	3.8	
8	1105276-01	45	3.5	
9	1105276-03	45	2.5	
10	1105276-05	45	3.9	
11	1105276-07	45	4.0	
12	1105276-09	45	4.0	
13	1105276-11	45	3.9	
14	1105276-13	45	3.5	
15	1105276-15	45	4.0	
16	1105276-17	45	4.0	
17	1105276-19	45	3.5	
18	1105316-03	45	3.8	
19	1105331-01	45	3.5	
20	1105331-02	45	3.5	

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water

Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water

Prepared: 5/30/2011

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F105371-BLK1	Blank	45	40					
F105371-BLK2	Blank	45	40					
F105371-BLK3	Blank	45	40					
F105371-BS1	Blank Spike	45	40	1100837	90			
F105371-BSD1	Blank Spike Dup	45	40	1100837	90			
F105371-DUP1	Duplicate	45	40					
F105371-MS1	Matrix Spike	45	40	1100837	90			
F105371-MSD1	Matrix Spike Dup	45	40	1100837	90			

Standard ID(s):

1100837

Description:

THg Secondary Spike 1000 ng/mL

Expiration:

14-Oct-11 00:00

Due Date: 6/6/2011

Analyst:	Liz Siska	Sequence #:	1F01012
Reviewer:	<i>Phayak Lany</i>	Dataset ID #:	MMHg15-110601-1
Date:	6/1/2011 <i>6/2/11</i>	WO #:	1105260, 1105274, 1105276, 1105316, 1105331
Batch #(s):	F105371	Client(s):	[REDACTED]

• Select the correct preparation method.

Analyte	Prep Method	Matrix	PQL
☒ MHg	FGS-013	MHg Distillation	Water 0.05 ng/L 0.05 ng/L
☐ MHg	FGS-010	KOH/MeOH Digest	Tissue 4 ng/g
☐ MHg	FGS-045	MeCl Extraction	Sed/Soil 0.050 ng/g
☐ DMHg	FGS-098.1 (Not Approved for use in AL lab)	ALL	

- Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)
- Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data
 - Reviewer: 100% of peak heights checked
 - Are there peak height errors?
 - Error on a sample: Do peak heights, responses, & initial results match corrected data?
 - Error on a Cal Pt, IB/CB, or PB: Has the data been reimported?
 - Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries).
 - Check and compare masses (review prep benchsheet)
 - Check and compare initial and final volumes
 - Do aliquots and dilutions written on benchsheet match those in Excel?
 - Is the sequence #, analyst, date, and instrument # on the QC page?
 - Is the analysis status correct? (analyzed/initial review/reviewed)
 - Original prep bench sheet added to data package?
 - Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)
- High QA? WO#(s)/Client(s): Lancaster Labs
- Client specific QC? (if Yes, refer to Project Notes/LIMS)
 - Have the QC requirements been met for all WO#s?
- 20 or fewer samples in batch?
 - 3 PBs, 1 LCS/LCSD (or BS/BSD), 1 MS/MSD/MD per batch?
 - 1 CCV and 1 CCB every 10 analytical runs?

QA/QC Data Checked

- R-value ≥ 0.995 (MDN data only)

Comments: _____

- The calibration curve included a minimum of 5 Standards

Comments: _____

- 1st Calibration Standard % Recoveries (70-130%)

Comments: _____

- RSD CF ($\leq 15\%$)

Comments: _____

- ICV % Recoveries 80-120%

Comments: _____

- CCV % Recoveries 75-125%

Comments: _____

Analyst Initials:	Reviewer Initials:
<i>LS</i>	<i>PL</i>
☒ YES ☐ NO	☒
☒ YES ☐ NO	☒
☒ YES ☐ NO	☒
☒ YES ☐ NO	☒
☒ YES ☐ NO ☐ N/A	☒
☒ YES ☐ NO ☐ N/A	☒
☒ YES ☐ NO ☐ N/A	☒
☐ YES ☐ NO ☒ N/A	☒
☒ YES ☐ NO ☐ N/A	☒
☒ YES ☐ NO ☐ N/A	☒
☒ YES ☐ NO	☒
☒ YES ☐ NO	☒
☒ YES ☐ NO	☒
☒ YES ☐ NO	☒
☒ YES ☐ NO	☒
☒ YES ☐ NO	☒
☒ YES ☐ NO	☒
☐ PASS ☐ FAIL ☒ N/A	☒
☒ YES ☐ NO	☒
☒ PASS ☐ FAIL	☒
☒ PASS ☐ FAIL	☒
☒ PASS ☐ FAIL	☒
☒ PASS ☐ FAIL	☒

Analyst:	Liz Siska	Sequence #:	1F01012
Reviewer:	<i>Phayush Kumar</i>	Dataset ID #:	MMHg15-110601-1
Date:	6/1/2011 <i>6/7/11</i>	WO #:	1105260 1105274 1105276 1105216 1105221
Batch #(s):	F105371	Client(s):	[REDACTED]

Analyst Initials: *LS* **Initials:** *PC*

12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%) ☒ PASS ☐ FAIL ☒
Comments: _____
13. LCS/LCSD or BS/BSD RPD (< 25%) ☒ PASS ☐ FAIL ☒
Comments: _____
14. Are the individual Preparation Blanks < PQL (waters < 0.045ng/L), see method PQL ☒ PASS ☐ FAIL ☒
(a) If not < PQL, note which PB(s) are above control limit: _____ ☒
(b) Is the mean PB < PQL (waters < 0.045ng/L)? ☒ YES ☐ NO ☒
15. Mean of ICB and CCBs < 0.025 ng/L ☒ PASS ☐ FAIL ☒
Comments: _____
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) ☐ YES ☐ NO ☒ N/A ☒
17. Is the correct 'Source' designated for MD/MS/MSD? ☒ YES ☐ NO ☒
18. For digested preps: was there a spike witness signature & date on the prep bench sheet? ☒ YES ☐ NO ☐ N/A ☒
19. MD RPD/MT RSD(< 25%) ☐ PASS ☒ FAIL ☒
Comments: qualifiable
20. MS/MSD RPD(< 25%) ☒ PASS ☐ FAIL ☒
Comments: _____
21. MS (AS) % Recoveries (65-130%) ☒ PASS ☐ FAIL ☒
Comments: _____
22. MSD (ASD) % Recoveries (65-130%) ☒ PASS ☐ FAIL ☒
Comments: _____
23. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630) ☐ YES ☒ NO ☒
24. Are all samples within instrument calibration range (or at maximum aliquot size)? ☒ YES ☐ NO ☒
Comments: _____
25. For instrumental dilutions, is the dilution factor in excel correct? ☐ PASS ☐ NO ☒ N/A ☒
Is the sample volume, diluent, and final volume of the dilution noted on benchsheet? ☐ PASS ☐ NO ☒ N/A ☒
26. Dissolved < Total metals (if applicable) ☒ PASS ☐ NO ☐ N/A ☒
Comments: _____
27. Effluent < Influent metals (visually confirm if needed) ☒ PASS ☐ NO ☐ N/A ☒
Comments: _____
28. Are re-runs noted with reason? ☐ YES ☐ NO ☒ N/A ☒
Comments: _____
29. For failing QC (CCV, CCB, PB, BS/BSD, CAL): ☐ YES ☐ NO ☒ N/A ☒
Was a bubbler and trap test run before the analytical run continued?
Comments: _____
30. Do re-run results compare to initial analysis (< 25% RPD)? ☐ YES ☐ NO ☐ N/A ☒
Comments: _____
31. Are qualifiers consistent with the data review flowcharts? ☒ YES ☐ NO ☐ N/A ☒
Comments: _____
32. Have non-reportable samples been imported into LIMS and clicked to non-reportable? ☐ YES ☐ NO ☒ N/A ☒
Comments: _____
33. Have re-extracts been created for non-reportable samples? ☐ YES ☐ NO ☒ N/A ☒
34. Narrations in MMO box in LIMS?
Comments: _____
35. Are there any HIGH QA projects within the data? ☒ YES ☐ NO
If so, place data package in QA office before scanning.

Analyst:	Liz Siska	Sequence #:	1F01012
Reviewer:	<i>P. Hargrett</i>	Dataset ID #:	MMHg15-110601-1
Date:	6/1/2011	WO #:	1105260 1105274 1105276 1105316 1105331
Batch #(s):	F105371	Client(s):	[REDACTED]

36 Additional Comments:

Analyst Initials: *LS* Reviewer Initials: *PL*
☒

Comments

- BLK2 PH=0.6
- DUP1 PH=14.2
- OT 6/8/11

Frontier Global Sciences, Inc
High QA Report: Total Solids
Analyst: Duyen Hinh, Ben Boritz
Sequence: TS110530-1, Batch F105379
Reviewer: Lucas Knowles
Reviewed Date: 6/24/2011

LMK 6/24/11

Client(s): Lancaster Labs (WO# 1105316)

Client specific QC: See WO.

(1) MD RPD/MT RSD < 25%.

- o Sample 1105304-04 was analyzed in duplicate. RPD was 5.3%.
- o Sample 1105274-01 was analyzed in duplicate. RPD was 1.1%.

(2) All quality control criteria were met.

- o All samples were in control.

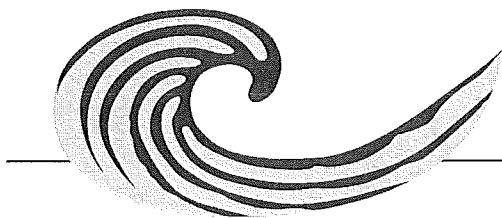
-Peer Reviewer checked transcriptions and calculations.

Follow-up items:

Email correspondence among the QA coordinator, lab manager, AL group leader, and PM group leader detailing qualifications or corrective actions may be appended to this report.

All analytical issues or other problems:

- o None.



FRONTIER GEOSCIENCES

ENVIRONMENTAL RESEARCH CORPORATION

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(206) 622-6960 • FAX: (206) 622-6870

Total Solids Dataset Cover Page

Dataset ID: TS110530-1LIMS Batch ID: F105379Work Order(s): 5804, 1105343, 1105344, 1104274, 1105316

5 BBs - 311

Analyst: dueynh, BBData Analysis: dueynh, BB

Client/Project Name*

Lancaster

*Clients with name in **bold High QA**

Analytical Issues/explanations:

QUALITY ASSURANCE
PEER-REVIEWED

QUALITY ASSURANCE REVIEWED

INITIALS: LMK 6/24/11INITIALS: PL 6/2/11

Preparation Date: May 30, 2011

Batch #: 1

Analyst: dueynh, BB

LIMS Batch ID: F105379

Work Order(s): 1105304, 1105343, 1105344, 1105274, 1105316

Project(s): TVA, Burleson, Lancaster

855-31-11

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1105304-01	1.328	5.849	4.521	3.729	2.401	53.1%	
2	1105304-02	1.338	4.294	2.956	2.767	1.429	48.3%	
3	1105304-03	1.315	3.909	2.594	2.410	1.095	42.2%	
4	1105304-04	1.330	4.404	3.074	2.786	1.456	47.4%	
4 MD	1105304-04MD	1.315	5.309	3.994	3.310	1.995	49.9%	5.3% RPD
5	1105304-05	1.348	5.280	3.932	3.778	2.430	61.8%	
6	1105304-06	1.327	4.369	3.042	2.774	1.447	47.6%	
7	1105343-01	1.346	5.223	3.877	3.809	2.463	63.5%	
8	1105343-02	1.336	4.742	3.406	3.391	2.055	60.3%	
9	1105343-03	1.341	5.220	3.879	3.466	2.125	54.8%	
10	1105344-01	1.336	4.334	2.998	2.563	1.227	40.9%	
11	1105274-01	1.357	6.934	5.577	3.284	1.927	34.6%	
12	1105274-01MD	1.330	6.863	5.533	3.221	1.891	34.2%	1.1% RPD
13	1105274-02	1.336	6.887	5.551	5.588	4.252	76.6%	
14	1105274-03	1.325	6.848	5.523	5.503	4.178	75.6%	
15	1105316-01	1.346	6.976	5.630	3.836	2.490	44.2%	
16	1105316-02	1.334	6.689	5.355	4.453	3.119	58.2%	

Total Solids Logbook

Lab Assistant(s): BB, nuyen Temperature Range 103-105°C Actual Temperature: 105°C Thermometer#: 16823
 Date: 5-30-11 Batch: F-105379 Oven # 4 Balance# 10
 Client(s)/Work Order: TVA 1105304, TVA 1105343, TVA 1105344, Barleson 1105274, Lancaster 1105316

Client	Sample ID	Pan#	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
TVA	1105304-01	1	1.328	5.849	3.729	
	1105304-02	2	1.338	4.294	2.767	
	1105304-03	3	1.315	3.909	2.410	
	1105304-04	4	1.330	4.404	2.786	
	1105304-04MD	4MD	1.315	5.309	3.310	
	1105304-05	5	1.348	5.280	2.778	
	1105304-06	6	1.327	4.369	2.774	
	1105343-01	7	1.346	5.223	3.809	
	1105343-02	8	1.336	4.742	3.391	
	1105343-03	9	1.341	5.220	3.466	
TVA Barleson	1105344-01	10	1.336	4.334	2.563	
	1105274-01	11	1.357	6.974	3.284	
	1105274-01MD	12	1.330	6.863	3.221	
Lancaster	1105274-02	13	1.336	6.887	5.588	
	1105274-03	14	1.325	6.848	5.503	
	1105316-01	15	1.346	6.976	3.836	
	1105316-02	16	1.334	6.889	4.453	
						5-31-11

PREPARATION BENCH SHEET

F105379

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: UNASSIGNED - Solids Analysis

Prepared: 5/30/2011

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	μl Spike1	Spike2 ID	μl Spike2	Extraction Comments
F105379-DUP1	Duplicate [1105304-04]	3.994	1.995					
F105379-DUP2	Duplicate [1105274-01]	5.533	1.891					

Standard ID(s): Description:

Expiration:

Due Date: 6/1/2011

PREPARATION BENCH SHEET

F105379

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment

Prepared using: UNASSIGNED - Solids Analysis

Prepared: 5/30/2011

Lab Number	Sample ID	Initial (g)	Final (g)	Sample Comments	Analysis Comments
1105274-01	SD SED	5.577	1.927	MS/MSD	
1105274-02	RCDS SED	5.551	4.252		
1105274-03	RCUS SED	5.523	4.178		
1105304-01	KIF-ERM0.5-SED-052311-F	4.521	2.401		EDD Required
1105304-02	KIF-ERM0.8-SED-052311-F	2.956	1.429		EDD Required
1105304-03	KIF-ERM1.0-AED-052311-F	2.594	1.095		EDD Required
1105304-04	KIF-ERM1.0-SED-052311-F	3.074	1.456	MS/MSD requested on this sample	EDD Required
1105304-05	KIF-ERM2.5-SED-052311-F	3.932	2.43		EDD Required
1105304-06	KIF-ERM4.0-SED-052311-F	3.042	1.447		EDD Required
1105316-01	6296495 SED-035-SIV-SD Grab	5.63	2.49	MS/MSD	High QA
1105316-02	6296496 DUP01-SIV-SD Grab	5.355	3.119		High QA
1105343-01	KIF-ERM3.0-SED-052411-F	3.877	2.463		EDD Required
1105343-02	KIF-ERM3.5-SED-052411-F	3.406	2.055		EDD Required
1105343-03	KIF-ERM5.5-SED-052411-F	3.879	2.125		EDD Required
1105344-01	KIF-ERM_REF-SED-052511-F	2.998	1.227		EDD Required

Work Order

Client

Project

1105274
1105304
1105316
1105343
1105344

Due Date: 6/1/2011

Analyst/Date: BB 5/31/2011 Reviewer/Date: Phayvath Lamy 6/2/11
 WO #: 1105304, 1105343, 1105344, 1105274, 1105316
 Batch #: F105379
 Dataset ID: TS110530-1 Client(s): TVA

• Select the correct analysis method.

SOP	Method	Matrix	MDL	PQL
☒	FGS-019.3	TS	Sed/Soil	-
☐	FGS-016.4	TSS	Water	0.5 mg/L

General Comments/Re-run requirements:

- Check for transcription errors from Benchsheet/Raw Data
 - Check and compare SampleID(s)
 - Check and compare masses and/or volumes
 - Are the analyst name, datasetID #, preparation date, and client names listed
 - Benchsheet prep date MUST match actual prep date
- 1 MD/MT per 10 client samples
- MD RPD/MT RSD $\leq$ 25%
- For TSS analysis, Preparation Blanks < 5 mg/L.
- For TSS analysis, Holding Time is 28 days from sample collection date.
- Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time.

☒ YES	☐ NO	☒
☒ YES	☐ NO	☒
☒ YES	☐ NO	☒
☒ YES	☐ NO	☒
☒ YES	☐ NO	☒
☒ PASS	☐ FAIL	☒
☐ YES	☐ NO	☒ N/A
☐ YES	☐ NO	☒ N/A
☒ YES	☐ NO	☐ N/A

Reviewer Initials PL

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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ANALYTICAL REPORT

Job Number: 200-5311-1

SDG Number: 5311

Job Description: CDM Organotin Project

For:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605

Attention: Nicole L. Maljovec



Approved for release.
James W Madison
Project Manager I
06/13/11 9:55 AM

James W Madison
Project Manager I
jim.madison@testamericainc.com
06/13/2011
Revision: 1

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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CASE NARRATIVE

Client: Lancaster Laboratories

Project: CDM Organotin Project

Report Number: 200-5311-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/25/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.0 C.

ORGANOTINS (Alkyltins) BY GC/FPD

Solid samples SED-035-SIV-SDMS and DUP03-SIV-QC-052311 were analyzed for Alkyltins by GC/FPD in accordance with TestAmerica Burlington SOP. The samples were prepared on 06/01/2011 and analyzed on 06/02/2011. Liquid sample FB078-SIV-052311 was also analyzed for Alkyltins, and was prepared on 05/26/2011 and analyzed on 06/02/2011.

The alkyltin analyses were accomplished using an internal standard method of analysis with tetra-n-propyltin as the internal standard. Peak areas were used to measure the instrument response in performing calibration and quantification. The analytical report forms correctly list the alkyltin analytes as unsubstituted alkyltin compounds. The analysis of three of the compounds employed the use of alkyltin chlorides. The results from the alkyltin chlorides required conversion factors to reflect the concentrations of the unsubstituted forms. For instance, tributyltin chloride was converted to tributyltin using a conversion factor of 0.89. Dibutyltin dichloride was converted to dibutyltin using a factor of 0.77. Monobutyltin trichloride was converted to monobutyltin using a factor of 0.62 and the surrogate, triphenyltin chloride was converted to triphenyltin using a factor of 0.90.

Note that Monobutyltin is known to have poor extraction efficiency, and the laboratory considers all results for this compound to be qualitative. All results for Monobutyltin (both detect and non-detect) are reported with a 'J' flag to indicate they are estimates. Although the definition of the J qualifier in this report is a result between MDL and RL, Monobutyltin was not detected in the samples in this delivery group, and in this case the J qualifier only implies that the results are qualitative. Although the solid blank spike sample yielded 39 % recovery of Monobutyltin, this compound was not recovered in matrix spikes performed on sample SED-035-SIV-SDMS. The liquid blank spike sample yielded 6% recovery of Monobutyltin, below the default control limits of 10-48%.

No other difficulties were encountered during the organotin analyses.

All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples SED-035-SIV-SDMS and DUP03-SIV-QC-052311 were analyzed for percent solids in accordance with EPA SW846 3550C. The samples were analyzed on 05/25/2011.

No difficulties were encountered during the % solids analyses.

All quality control parameters were within the acceptance limits.

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1SDG No.: 5311Instrument ID: 2860.i Analysis Batch Number: 19102Lab Sample ID: IC 200-19102/5 Client Sample ID: _____Date Analyzed: 06/02/11 13:50 Lab File ID: 02jun110958-r071.d GC Column: RTX-35 ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetra-n-propyl tin	3.07	Peak not found by the data system	wbr	06/03/11 12:42
Monobutyltin	8.02	Analyte misidentified by the data system	wbr	06/03/11 12:43

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1SDG No.: 5311Instrument ID: 2860.i Analysis Batch Number: 19104Lab Sample ID: 200-5311-1 MS Client Sample ID: SED-035-SIV-SDMS MSDate Analyzed: 06/02/11 16:06 Lab File ID: 02jun111106-r061.d GC Column: RTX-35 ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Monobutyltin	8.02	Not specified	wbr	06/03/11 12:56

Lab Sample ID: LCS 200-18670/2-A Client Sample ID: _____Date Analyzed: 06/02/11 16:56 Lab File ID: 02jun111106-r091.d GC Column: RTX-35 ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Monobutyltin	8.02	Analyte misidentified by the data system	wbr	06/03/11 12:58

SAMPLE SUMMARY

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
200-5311-1	SED-035-SIV-SDMS	Solid	05/23/2011 1500	05/25/2011 1015
200-5311-1MS	SED-035-SIV-SDMS	Solid	05/23/2011 1500	05/25/2011 1015
200-5311-1MSD	SED-035-SIV-SDMS	Solid	05/23/2011 1500	05/25/2011 1015
200-5311-1DU	SED-035-SIV-SDMS	Solid	05/23/2011 1500	05/25/2011 1015
200-5311-2	DUP03-SIV-QC-052311	Solid	05/23/2011 1510	05/25/2011 1015
200-5311-3	FB08-SIV-052311	Water	05/23/2011 1600	05/25/2011 1015

METHOD SUMMARY

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Organotins (GC/FPD)	TAL BUR	TestAmerica SOP Organotins/GC	
Ultrasonic Extraction	TAL BUR		SW846 3550B
Percent Moisture	TAL BUR	EPA Moisture	
Matrix: Water			
Organotins (GC/FPD)	TAL BUR	TestAmerica SOP Organotins/GC	
Liquid-Liquid Extraction (Separatory Funnel)	TAL BUR		SW846 3510C

Lab References:

TAL BUR = TestAmerica Burlington

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TestAmerica SOP = TestAmerica, Inc., Standard Operating Procedure

METHOD / ANALYST SUMMARY

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Method	Analyst	Analyst ID
TestAmerica SOP Organotins/GC	Robinson, Wallace B	WBR
EPA Moisture	Nelson, Andrea J	AJN

Analytical Data

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Client Sample ID: SED-035-SIV-SDMS

Lab Sample ID: 200-5311-1

Date Sampled: 05/23/2011 1500

Client Matrix: Solid

% Moisture: 48.1

Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method:	Organotins/GC	Analysis Batch:	200-19104	Instrument ID:	2860.i
Prep Method:	3550B	Prep Batch:	200-18879	Initial Weight/Volume:	30.26 g
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/02/2011 1515			Injection Volume:	1.5 uL
Prep Date:	06/01/2011 1738			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Tetrabutyltin		3.2	U	0.84	3.2
Tributyltin		2.9	U	1.3	2.9
Dibutyltin		2.5	U	0.76	2.5
Monobutyltin		9.5	U J	9.5	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Triphenyltin	91		30 - 120

Analytical Data

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Client Sample ID: SED-035-SIV-SDMS

Lab Sample ID: 200-5311-1

Date Sampled: 05/23/2011 1500

Client Matrix: Solid

% Moisture: 48.1

Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method: Organotins/GC

Analysis Batch: 200-19104

Instrument ID: 2860.i

Prep Method: 3550B

Prep Batch: 200-18879

Initial Weight/Volume: 30.26 g

Dilution: 1.0

Final Weight/Volume: 1000 uL

Analysis Date: 06/02/2011 1515

Injection Volume: 1.5 uL

Prep Date: 06/01/2011 1738

Result Type: SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tripentyltin	101		30 - 120

Analytical Data

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Client Sample ID: DUP03-SIV-QC-052311

Lab Sample ID: 200-5311-2

Date Sampled: 05/23/2011 1510

Client Matrix: Solid

% Moisture: 45.9

Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method:	Organotins/GC	Analysis Batch:	200-19104	Instrument ID:	2860.i
Prep Method:	3550B	Prep Batch:	200-18879	Initial Weight/Volume:	30.78 g
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/02/2011 1549			Injection Volume:	1.5 uL
Prep Date:	06/01/2011 1738			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Tetrabutyltin		3.1	U	0.79	3.1
Tributyltin		2.7	U	1.2	2.7
Dibutyltin		2.3	U	0.72	2.3
Monobutyltin		9.0	U J	9.0	9.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Triphenyltin	90		30 - 120

Analytical Data

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Client Sample ID: DUP03-SIV-QC-052311

Lab Sample ID: 200-5311-2

Date Sampled: 05/23/2011 1510

Client Matrix: Solid

% Moisture: 45.9

Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method: Organotins/GC

Analysis Batch: 200-19104

Instrument ID: 2860.i

Prep Method: 3550B

Prep Batch: 200-18879

Initial Weight/Volume: 30.78 g

Dilution: 1.0

Final Weight/Volume: 1000 uL

Analysis Date: 06/02/2011 1549

Injection Volume: 1.5 uL

Prep Date: 06/01/2011 1738

Result Type: SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tripentyltin	95		30 - 120

Analytical Data

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Client Sample ID: FB08-SIV-052311

Lab Sample ID: 200-5311-3

Date Sampled: 05/23/2011 1600

Client Matrix: Water

Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method:	Organotins/GC	Analysis Batch:	200-19104	Instrument ID:	2860.i
Prep Method:	3510C	Prep Batch:	200-18670	Initial Weight/Volume:	1040 mL
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/02/2011 1713			Injection Volume:	1.5 uL
Prep Date:	05/26/2011 2040			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Tetrabutyltin	0.048	U	0.012	0.048
Tributyltin	0.043	U	0.012	0.043
Dibutyltin	0.038	U	0.0081	0.038
Monobutyltin	0.48	U J *	0.48	0.48

Surrogate	%Rec	Qualifier	Acceptance Limits
Triphenyltin	88		15 - 150

Analytical Data

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Client Sample ID: FB08-SIV-052311

Lab Sample ID: 200-5311-3

Date Sampled: 05/23/2011 1600

Client Matrix: Water

Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method:	Organotins/GC	Analysis Batch:	200-19104	Instrument ID:	2860.i
Prep Method:	3510C	Prep Batch:	200-18670	Initial Weight/Volume:	1040 mL
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/02/2011 1713			Injection Volume:	1.5 uL
Prep Date:	05/26/2011 2040			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tripentyltin	91		15 - 150

Analytical Data

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

General Chemistry

Client Sample ID: SED-035-SIV-SDMS

Lab Sample ID: 200-5311-1

Date Sampled: 05/23/2011 1500

Client Matrix: Solid

Date Received: 05/25/2011 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Solids	51.9		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-18581		Analysis Date: 05/25/2011 1402				DryWt Corrected: N	

Analytical Data

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

General Chemistry

Client Sample ID: DUP03-SIV-QC-052311

Lab Sample ID: 200-5311-2

Date Sampled: 05/23/2011 1510

Client Matrix: Solid

Date Received: 05/25/2011 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Solids	54.1		%	0.25	0.25	1.0	Moisture
Analysis Batch: 200-18581		Analysis Date: 05/25/2011 1402		DryWt Corrected: N			

Quality Control Results

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Surrogate Recovery Report

Organotins/GC Organotins (GC/FPD)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TPT1 %Rec	TPT2 %Rec
200-5311-1	SED-035-SIV-SDMS	101	91
200-5311-2	DUP03-SIV-QC-0523 11	95	90
MB 200-18879/1-A		102	99
LCS 200-18879/2-A		97	96
200-5311-1 MS	SED-035-SIV-SDMS MS	97	90
200-5311-1 MSD	SED-035-SIV-SDMS MSD	107	109
200-5311-1 DU	SED-035-SIV-SDMS DU	103	95

Surrogate

TPT = Tripentyltin

Acceptance Limits

30-120

Quality Control Results

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Surrogate Recovery Report

Organotins/GC Organotins (GC/FPD)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TPT1 %Rec	TPT2 %Rec
200-5311-3	FB08-SIV-052311	91	88
MB 200-18670/1-A		101	97
LCS 200-18670/2-A		83	86

Surrogate

Acceptance Limits

TPT = Tripentyltin

15-150

Quality Control Results

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Method Blank - Batch: 200-18670

Method: Organotins/GC Preparation: 3510C

Lab Sample ID: MB 200-18670/1-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/02/2011 1640
Prep Date: 05/26/2011 2040
Leach Date: N/A

Analysis Batch: 200-19104
Prep Batch: 200-18670
Leach Batch: N/A
Units: ug/L

Instrument ID: 2860.i
Lab File ID: 02jun111106-r081.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1000 uL
Injection Volume: 1.5 uL
Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
Tetrabutyltin	0.050	U	0.012	0.050
Tributyltin	0.045	U	0.012	0.045
Dibutyltin	0.039	U	0.0084	0.039
Monobutyltin	0.50	U J	0.50	0.50
Surrogate	% Rec		Acceptance Limits	
Tripentyltin	97		15 - 150	
Surrogate	% Rec		Acceptance Limits	
Tripentyltin	101		15 - 150	

Lab Control Sample - Batch: 200-18670

Method: Organotins/GC Preparation: 3510C

Lab Sample ID: LCS 200-18670/2-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 06/02/2011 1656
Prep Date: 05/26/2011 2040
Leach Date: N/A

Analysis Batch: 200-19104
Prep Batch: 200-18670
Leach Batch: N/A
Units: ug/L

Instrument ID: 2860.i
Lab File ID: 02jun111106-r091.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1000 uL
Injection Volume: 1.5 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Tetrabutyltin	0.500	0.389	78	30 - 150	
Tributyltin	0.445	0.337	76	30 - 150	
Dibutyltin	0.385	0.295	77	30 - 150	
Monobutyltin	0.310	0.50	6	10 - 48	U J *
Surrogate	% Rec		Acceptance Limits		
Tripentyltin	83		15 - 150		
Surrogate	% Rec		Acceptance Limits		
Tripentyltin	86		15 - 150		

Quality Control Results

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Method Blank - Batch: 200-18879

Method: Organotins/GC Preparation: 3550B

Lab Sample ID: MB 200-18879/1-A
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 06/02/2011 1441
Prep Date: 06/01/2011 1738
Leach Date: N/A

Analysis Batch: 200-19104
Prep Batch: 200-18879
Leach Batch: N/A
Units: ug/Kg

Instrument ID: 2860.i
Lab File ID: 02jun111106-r011.d
Initial Weight/Volume: 30.00 g
Final Weight/Volume: 1000 uL
Injection Volume: 1.5 uL
Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
Tetrabutyltin	1.7	U	0.44	1.7
Tributyltin	1.5	U	0.67	1.5
Dibutyltin	1.3	U	0.40	1.3
Monobutyltin	5.0	U J	5.0	5.0
Surrogate	% Rec		Acceptance Limits	
Triphenyltin	99		30 - 120	
Surrogate	% Rec		Acceptance Limits	
Triphenyltin	102		30 - 120	

Lab Control Sample - Batch: 200-18879

Method: Organotins/GC Preparation: 3550B

Lab Sample ID: LCS 200-18879/2-A
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 06/02/2011 1458
Prep Date: 06/01/2011 1738
Leach Date: N/A

Analysis Batch: 200-19104
Prep Batch: 200-18879
Leach Batch: N/A
Units: ug/Kg

Instrument ID: 2860.i
Lab File ID: 02jun111106-r021.d
Initial Weight/Volume: 30.00 g
Final Weight/Volume: 1000 uL
Injection Volume: 1.5 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Tetrabutyltin	16.7	13.8	83	30 - 160	
Tributyltin	14.8	13.4	91	30 - 160	
Dibutyltin	12.8	10.7	83	30 - 160	
Monobutyltin	10.3	5.0	39	10 - 48	U J
Surrogate	% Rec		Acceptance Limits		
Triphenyltin	96		30 - 120		
Surrogate	% Rec		Acceptance Limits		
Triphenyltin	97		30 - 120		

Quality Control Results

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 200-18879

Method: Organotins/GC Preparation: 3550B

MS Lab Sample ID: 200-5311-1	Analysis Batch: 200-19104	Instrument ID: 2860.i
Client Matrix: Solid	Prep Batch: 200-18879	Lab File ID: 02jun111106-r061.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 30.92 g
Analysis Date: 06/02/2011 1606		Final Weight/Volume: 1000 uL
Prep Date: 06/01/2011 1738		Injection Volume: 1.5 uL
Leach Date: N/A		Column ID: PRIMARY

MSD Lab Sample ID: 200-5311-1	Analysis Batch: 200-19104	Instrument ID: 2860.i
Client Matrix: Solid	Prep Batch: 200-18879	Lab File ID: 02jun111106-r071.d
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 30.56 g
Analysis Date: 06/02/2011 1623		Final Weight/Volume: 1000 uL
Prep Date: 06/01/2011 1738		Injection Volume: 1.5 uL
Leach Date: N/A		Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Tetrabutyltin	88	90	30 - 160	3	30		
Tributyltin	96	96	30 - 160	2	30		
Dibutyltin	92	94	30 - 160	2	30		
Monobutyltin	0	0	10 - 48	NC	30	U J F	U J F
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
Tripentyltin	90		107	30 - 120			
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
Tripentyltin	97		109	30 - 120			

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 200-18879

Method: Organotins/GC Preparation: 3550B

MS Lab Sample ID: 200-5311-1	Units: ug/Kg	MSD Lab Sample ID: 200-5311-1
Client Matrix: Solid		Client Matrix: Solid
Dilution: 1.0		Dilution: 1.0
Analysis Date: 06/02/2011 1606		Analysis Date: 06/02/2011 1623
Prep Date: 06/01/2011 1738		Prep Date: 06/01/2011 1738
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Tetrabutyltin	3.2	U	31.1	31.5	27.5	28.4
Tributyltin	2.9	U	27.7	28.0	26.5	27.0
Dibutyltin	2.5	U	24.0	24.3	22.2	22.7
Monobutyltin	9.5	U	19.3	19.5	9.3	U J F

Quality Control Results

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Duplicate - Batch: 200-18879

Method: Organotins/GC

Preparation: 3550B

Lab Sample ID:	200-5311-1	Analysis Batch:	200-19104	Instrument ID:	2860.i
Client Matrix:	Solid	Prep Batch:	200-18879	Lab File ID:	02jun111106-r041.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.20 g
Analysis Date:	06/02/2011 1532	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	06/01/2011 1738			Injection Volume:	1.5 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Tetrabutyltin	3.2	U	3.1	NC	30	U
Tributyltin	2.9	U	2.7	NC	30	U
Dibutyltin	2.5	U	2.4	NC	30	U
Monobutyltin	9.5	U	9.1	NC	30	U J
Surrogate	% Rec		Acceptance Limits			
Tripentyltin	95		30 - 120			
Surrogate	% Rec		Acceptance Limits			
Tripentyltin	103		30 - 120			

Quality Control Results

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Duplicate - Batch: 200-18581

Method: Moisture

Preparation: N/A

Lab Sample ID: 200-5311-1

Analysis Batch: 200-18581

Instrument ID: No Equipment

Client Matrix: Solid

Prep Batch: N/A

Lab File ID: N/A

Dilution: 1.0

Leach Batch: N/A

Initial Weight/Volume:

Analysis Date: 05/25/2011 1402

Units: %

Final Weight/Volume:

Prep Date: N/A

Leach Date: N/A

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Solids	51.9	54.4	4.56		

DATA REPORTING QUALIFIERS

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

Lab Section	Qualifier	Description
GC Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery or RPD exceeds the control limits
	*	Recovery or RPD exceeds control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Quality Control Results

Client: Lancaster Laboratories

Job Number: 200-5311-1

Sdg Number: 5311

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 200-18670					
LCS 200-18670/2-A	Lab Control Sample	T	Water	3510C	
MB 200-18670/1-A	Method Blank	T	Water	3510C	
200-5311-3	FB08-SIV-052311	T	Water	3510C	
Prep Batch: 200-18879					
LCS 200-18879/2-A	Lab Control Sample	T	Solid	3550B	
MB 200-18879/1-A	Method Blank	T	Solid	3550B	
200-5311-1	SED-035-SIV-SDMS	T	Solid	3550B	
200-5311-1DU	Duplicate	T	Solid	3550B	
200-5311-1MS	Matrix Spike	T	Solid	3550B	
200-5311-1MSD	Matrix Spike Duplicate	T	Solid	3550B	
200-5311-2	DUP03-SIV-QC-052311	T	Solid	3550B	
Analysis Batch:200-19104					
LCS 200-18670/2-A	Lab Control Sample	T	Water	Organotins/GC	200-18670
MB 200-18670/1-A	Method Blank	T	Water	Organotins/GC	200-18670
LCS 200-18879/2-A	Lab Control Sample	T	Solid	Organotins/GC	200-18879
MB 200-18879/1-A	Method Blank	T	Solid	Organotins/GC	200-18879
200-5311-1	SED-035-SIV-SDMS	T	Solid	Organotins/GC	200-18879
200-5311-1DU	Duplicate	T	Solid	Organotins/GC	200-18879
200-5311-1MS	Matrix Spike	T	Solid	Organotins/GC	200-18879
200-5311-1MSD	Matrix Spike Duplicate	T	Solid	Organotins/GC	200-18879
200-5311-2	DUP03-SIV-QC-052311	T	Solid	Organotins/GC	200-18879
200-5311-3	FB08-SIV-052311	T	Water	Organotins/GC	200-18670

Report Basis

T = Total

General Chemistry

Analysis Batch:200-18581

200-5311-1	SED-035-SIV-SDMS	T	Solid	Moisture
200-5311-1DU	Duplicate	T	Solid	Moisture
200-5311-2	DUP03-SIV-QC-052311	T	Solid	Moisture

Report Basis

T = Total

Quality Control Results

Client: Lancaster Laboratories

Job Number: 200-5311-1
SDG: 5311

Laboratory Chronicle

Lab ID: 200-5311-1

Client ID: SED-035-SIV-SDMS

Sample Date/Time: 05/23/2011 15:00 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	200-5311-A-1-A		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	200-5311-A-1-A		200-19104	200-18879	06/02/2011 15:15	1	TAL BUR	WBR
A:Moisture	200-5311-A-1		200-18581		05/25/2011 14:02	1	TAL BUR	AJN

Lab ID: 200-5311-1

Client ID: SED-035-SIV-SDMS

Sample Date/Time: 05/23/2011 15:00 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	200-5311-A-1-D MS		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	200-5311-A-1-D MS		200-19104	200-18879	06/02/2011 16:06	1	TAL BUR	WBR

Lab ID: 200-5311-1

Client ID: SED-035-SIV-SDMS

Sample Date/Time: 05/23/2011 15:00 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	200-5311-A-1-C MSD		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	200-5311-A-1-C MSD		200-19104	200-18879	06/02/2011 16:23	1	TAL BUR	WBR

Lab ID: 200-5311-1

Client ID: SED-035-SIV-SDMS

Sample Date/Time: 05/23/2011 15:00 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	200-5311-A-1-B DU		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	200-5311-A-1-B DU		200-19104	200-18879	06/02/2011 15:32	1	TAL BUR	WBR
A:Moisture	200-5311-A-1 DU		200-18581		05/25/2011 14:02	1	TAL BUR	AJN

Lab ID: 200-5311-2

Client ID: DUP03-SIV-QC-052311

Sample Date/Time: 05/23/2011 15:10 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	200-5311-A-2-A		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	200-5311-A-2-A		200-19104	200-18879	06/02/2011 15:49	1	TAL BUR	WBR
A:Moisture	200-5311-A-2		200-18581		05/25/2011 14:02	1	TAL BUR	AJN

Quality Control Results

Client: Lancaster Laboratories

Job Number: 200-5311-1
SDG: 5311

Laboratory Chronicle

Lab ID: 200-5311-3

Client ID: FB08-SIV-052311

Sample Date/Time: 05/23/2011 16:00 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	200-5311-A-3-A		200-19104	200-18670	05/26/2011 20:40	1	TAL BUR	JFF
A:Organotins/GC	200-5311-A-3-A		200-19104	200-18670	06/02/2011 17:13	1	TAL BUR	WBR

Lab ID: MB

Client ID: N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	MB 200-18879/1-A		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	MB 200-18879/1-A		200-19104	200-18879	06/02/2011 14:41	1	TAL BUR	WBR
P:3510C	MB 200-18670/1-A		200-19104	200-18670	05/26/2011 20:40	1	TAL BUR	JFF
A:Organotins/GC	MB 200-18670/1-A		200-19104	200-18670	06/02/2011 16:40	1	TAL BUR	WBR

Lab ID: LCS

Client ID: N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	LCS 200-18879/2-A		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	LCS 200-18879/2-A		200-19104	200-18879	06/02/2011 14:58	1	TAL BUR	WBR
P:3510C	LCS 200-18670/2-A		200-19104	200-18670	05/26/2011 20:40	1	TAL BUR	JFF
A:Organotins/GC	LCS 200-18670/2-A		200-19104	200-18670	06/02/2011 16:56	1	TAL BUR	WBR

Lab References:

TAL BUR = TestAmerica Burlington

Method Organotins

Organotins (GC/FPD) by Method
Organotins

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Burlington

Job No.: 200-5311-1

SDG No.: 5311

Matrix: Solid

Level: Low

GC Column (1): RTX-35 ID: 0.32 (mm)

GC Column (2): RTX-5 ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	TPT1 #	TPT2 #
SED-035-SIV-SDMS	200-5311-1	101	91
DUP03-SIV-QC-05231 1	200-5311-2	95	90
	MB 200-18879/1-A	102	99
	LCS 200-18879/2-A	97	96
SED-035-SIV-SDMS MS	200-5311-1 MS	97	90
SED-035-SIV-SDMS MSD	200-5311-1 MSD	107	109
SED-035-SIV-SDMS DU	200-5311-1 DU	103	95

TPT = Triphenyltin

QC LIMITS
30-120

Column to be used to flag recovery values

FORM II Organotins/GC

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Matrix: Water Level: Low
GC Column (1): RTX-35 ID: 0.32 (mm) GC Column (2): RTX-5 ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	TPT1 #	TPT2 #
FB08-SIV-052311	200-5311-3	91	88
	MB 200-18670/1-A	101	97
	LCS 200-18670/2-A	83	86

TPT = Triphenyltin

QC LIMITS
15-150

Column to be used to flag recovery values

FORM II Organotins/GC

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
 SDG No.: 5311
 Matrix: Water Level: Low Lab File ID: 02jun111106-r091.d
 Lab ID: LCS 200-18670/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrabutyltin	0.500	0.389	78	30-150	
Tributyltin	0.445	0.337	76	30-150	
Dibutyltin	0.385	0.295	77	30-150	
Monobutyltin	0.310	0.50U J	6	10-48	*

Column to be used to flag recovery and RPD values
 FORM III Organotins/GC

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Matrix: Solid Level: Low Lab File ID: 02jun111106-r021.d
Lab ID: LCS 200-18879/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Tetrabutyltin	16.7	13.8	83	30-160	
Tributyltin	14.8	13.4	91	30-160	
Dibutyltin	12.8	10.7	83	30-160	
Monobutyltin	10.3	5.0U J	39	10-48	

FORM III
GC SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
 SDG No.: 5311
 Matrix: Solid Level: Low Lab File ID: 02jun111106-r061.d
 Lab ID: 200-5311-1 MS Client ID: SED-035-SIV-SDMS MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Tetrabutyltin	31.1	3.2 U	27.5	88	30-160	
Tributyltin	27.7	2.9 U	26.5	96	30-160	
Dibutyltin	24.0	2.5 U	22.2	92	30-160	
Monobutyltin	19.3	9.5U J	9.3U J	0	10-48	F

FORM III
GC SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
 SDG No.: 5311
 Matrix: Solid Level: Low Lab File ID: 02jun111106-r071.d
 Lab ID: 200-5311-1 MSD Client ID: SED-035-SIV-SDMS MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Tetrabutyltin	31.5	28.4	90	3	30	30-160	
Tributyltin	28.0	27.0	96	2	30	30-160	
Dibutyltin	24.3	22.7	94	2	30	30-160	
Monobutyltin	19.5	9.5U J	0	NC	30	10-48	F

Column to be used to flag recovery and RPD values
 FORM III Organotins/GC

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Lab Sample ID: MB 200-18670/1-A
Matrix: Water Date Extracted: 05/26/2011 20:40
Lab File ID: (1) 02jun111106-r081.d Lab File ID: (2) 02jun111106-r081.d
Date Analyzed: (1) 06/02/2011 16:40 Date Analyzed: (2) 06/02/2011 16:40
Instrument ID: (1) 2860.i Instrument ID: (2) 2860.i
GC Column: (1) RTX-35 ID: 0.32 (mm) GC Column: (2) RTX-5 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 200-18670/2-A	06/02/2011 16:56	06/02/2011 16:56
FB08-SIV-052311	200-5311-3	06/02/2011 17:13	06/02/2011 17:13

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Lab Sample ID: MB 200-18879/1-A
Matrix: Solid Date Extracted: 06/01/2011 17:38
Lab File ID: (1) 02jun111106-r011.d Lab File ID: (2) 02jun111106-r011.d
Date Analyzed: (1) 06/02/2011 14:41 Date Analyzed: (2) 06/02/2011 14:41
Instrument ID: (1) 2860.i Instrument ID: (2) 2860.i
GC Column: (1) RTX-35 ID: 0.32 (mm) GC Column: (2) RTX-5 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 200-18879/2-A	06/02/2011 14:58	06/02/2011 14:58
SED-035-SIV-SDMS	200-5311-1	06/02/2011 15:15	06/02/2011 15:15
SED-035-SIV-SDMS DU	200-5311-1 DU	06/02/2011 15:32	06/02/2011 15:32
DUP03-SIV-QC-052311	200-5311-2	06/02/2011 15:49	06/02/2011 15:49
SED-035-SIV-SDMS MS	200-5311-1 MS	06/02/2011 16:06	06/02/2011 16:06
SED-035-SIV-SDMS MSD	200-5311-1 MSD	06/02/2011 16:23	06/02/2011 16:23

FORM VIII
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
 SDG No.: 5311
 Sample No.: ICRT 200-19102/3 Date Analyzed: 06/02/2011 13:16
 Instrument ID: 2860.i GC Column: RTX-35 ID: 0.32 (mm)
 Lab File ID (Standard): 02jun110958-r051.d Heated Purge: (Y/N) N
 Calibration ID: 7089

		TPT					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION SURROGATE		217441	7.55				
UPPER LIMIT			7.60				
LOWER LIMIT			7.50				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-18879/1-A		458751	7.56				
LCS 200-18879/2-A		430975	7.56				
200-5311-1	SED-035-SIV-SDMS	439526	7.56				
200-5311-1 DU	SED-035-SIV-SDMS DU	440301	7.56				
200-5311-2	DUP03-SIV-QC-052311	407373	7.57				
200-5311-1 MS	SED-035-SIV-SDMS MS	410828	7.57				
200-5311-1 MSD	SED-035-SIV-SDMS MSD	485466	7.56				
MB 200-18670/1-A		438129	7.57				
LCS 200-18670/2-A		458045	7.57				
200-5311-3	FB08-SIV-052311	407113	7.56				
CCV 200-19104/11		225986	7.57				

TPT = Tripentyltin

TPT RT Limit = $\pm$ 0 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII ORGANOTINS/GC

FORM VIII
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
 SDG No.: 5311
 Sample No.: ICRT 200-19102/3 Date Analyzed: 06/02/2011 13:16
 Instrument ID: 2860.i GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): 02jun110958-r051.d Heated Purge: (Y/N) N
 Calibration ID: 7090

		TPT					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION SURROGATE		253291	8.68				
UPPER LIMIT			8.73				
LOWER LIMIT			8.63				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-18879/1-A		488762	8.68				
LCS 200-18879/2-A		481303	8.69				
200-5311-1	SED-035-SIV-SDMS	462531	8.69				
200-5311-1 DU	SED-035-SIV-SDMS DU	468704	8.68				
200-5311-2	DUP03-SIV-QC-052311	429763	8.70				
200-5311-1 MS	SED-035-SIV-SDMS MS	434193	8.69				
200-5311-1 MSD	SED-035-SIV-SDMS MSD	529582	8.69				
MB 200-18670/1-A		472209	8.69				
LCS 200-18670/2-A		527940	8.69				
200-5311-3	FB08-SIV-052311	433640	8.69				
CCV 200-19104/11		251691	8.70				

TPT = Triphenyltin

TPT RT Limit = $\pm$ 0 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII ORGANOTINS/GC

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
 SDG No.: 5311
 Client Sample ID: SED-035-SIV-SDMS MS Lab Sample ID: 200-5311-1 MS
 Instrument ID (1): 2860.i Instrument ID (2): 2860.i
 Date Analyzed (1): 06/02/2011 16:06 Date Analyzed (2): 06/02/2011 16:06
 GC Column (1): RTX-35 ID: 0.32 (mm) GC Column (2): RTX-5 ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Tetrabutyltin	1		5.30	5.23	5.33	28.8		4.4
	2		6.45	6.39	6.49	27.5		
Tributyltin	1		6.32	6.25	6.35	26.5		0.9
	2		7.44	7.38	7.48	26.7		
Dibutyltin	1		7.22	7.14	7.24	22.2		3.0
	2		8.32	8.26	8.36	22.8		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
 SDG No.: 5311
 Client Sample ID: SED-035-SIV-SDMS MSD Lab Sample ID: 200-5311-1 MSD
 Instrument ID (1): 2860.i Instrument ID (2): 2860.i
 Date Analyzed (1): 06/02/2011 16:23 Date Analyzed (2): 06/02/2011 16:23
 GC Column (1): RTX-35 ID: 0.32 (mm) GC Column (2): RTX-5 ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Tetrabutyltin	1		5.29	5.23	5.33	28.4		0.1
	2		6.45	6.39	6.49	28.4		
Tributyltin	1		6.31	6.25	6.35	27.0		2.5
	2		7.44	7.38	7.48	27.7		
Dibutyltin	1		7.20	7.14	7.24	22.7		7.9
	2		8.32	8.26	8.36	24.6		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
 SDG No.: 5311
 Client Sample ID: _____ Lab Sample ID: LCS 200-18670/2-A
 Instrument ID (1): 2860.i Instrument ID (2): 2860.i
 Date Analyzed (1): 06/02/2011 16:56 Date Analyzed (2): 06/02/2011 16:56
 GC Column (1): RTX-35 ID: 0.32 (mm) GC Column (2): RTX-5 ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Tetrabutyltin	1		5.30	5.23	5.33	0.396		1.9
	2		6.45	6.39	6.49	0.389		
Tributyltin	1		6.32	6.25	6.35	0.350		3.8
	2		7.44	7.38	7.48	0.337		
Dibutyltin	1		7.21	7.14	7.24	0.295		2.5
	2		8.32	8.26	8.36	0.303		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
 SDG No.: 5311
 Client Sample ID: _____ Lab Sample ID: LCS 200-18879/2-A
 Instrument ID (1): 2860.i Instrument ID (2): 2860.i
 Date Analyzed (1): 06/02/2011 14:58 Date Analyzed (2): 06/02/2011 14:58
 GC Column (1): RTX-35 ID: 0.32 (mm) GC Column (2): RTX-5 ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Tetrabutyltin	1		5.29	5.23	5.33	15.3		10.0
	2		6.45	6.39	6.49	13.8		
Tributyltin	1		6.31	6.25	6.35	13.6		1.0
	2		7.44	7.38	7.48	13.4		
Dibutyltin	1		7.20	7.14	7.24	10.7		1.8
	2		8.32	8.26	8.36	10.9		

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-5311-1</u>
SDG No.: <u>5311</u>	
Client Sample ID: <u>SED-035-SIV-SDMS</u>	Lab Sample ID: <u>200-5311-1</u>
Matrix: <u>Solid</u>	Lab File ID: <u>02jun111106-r031.d</u>
Analysis Method: <u>Organotins/GC</u>	Date Collected: <u>05/23/2011 15:00</u>
Extraction Method: <u>3550B</u>	Date Extracted: <u>06/01/2011 17:38</u>
Sample wt/vol: <u>30.26(g)</u>	Date Analyzed: <u>06/02/2011 15:15</u>
Con. Extract Vol.: <u>1000(uL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1.5(uL)</u>	GC Column: <u>RTX-35</u> ID: <u>0.32 (mm)</u>
% Moisture: <u>48.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>19104</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	3.2	U	3.2	0.84
688-73-3	Tributyltin	2.9	U	2.9	1.3
1002-53-5	Dibutyltin	2.5	U	2.5	0.76
2406-65-7	Monobutyltin	9.5	U J	9.5	9.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	101		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1
Client Smp ID: SED-035-SIV-SDMS
Inj Date : 02-JUN-2011 15:15
Operator : WBR
Smp Info : 200-5311-A-1-A
Misc Info : 200-5311-A-1-A
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5
Inst ID: 2860_1.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
Compound Sublist: all.sub
Sample Matrix: SOIL

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

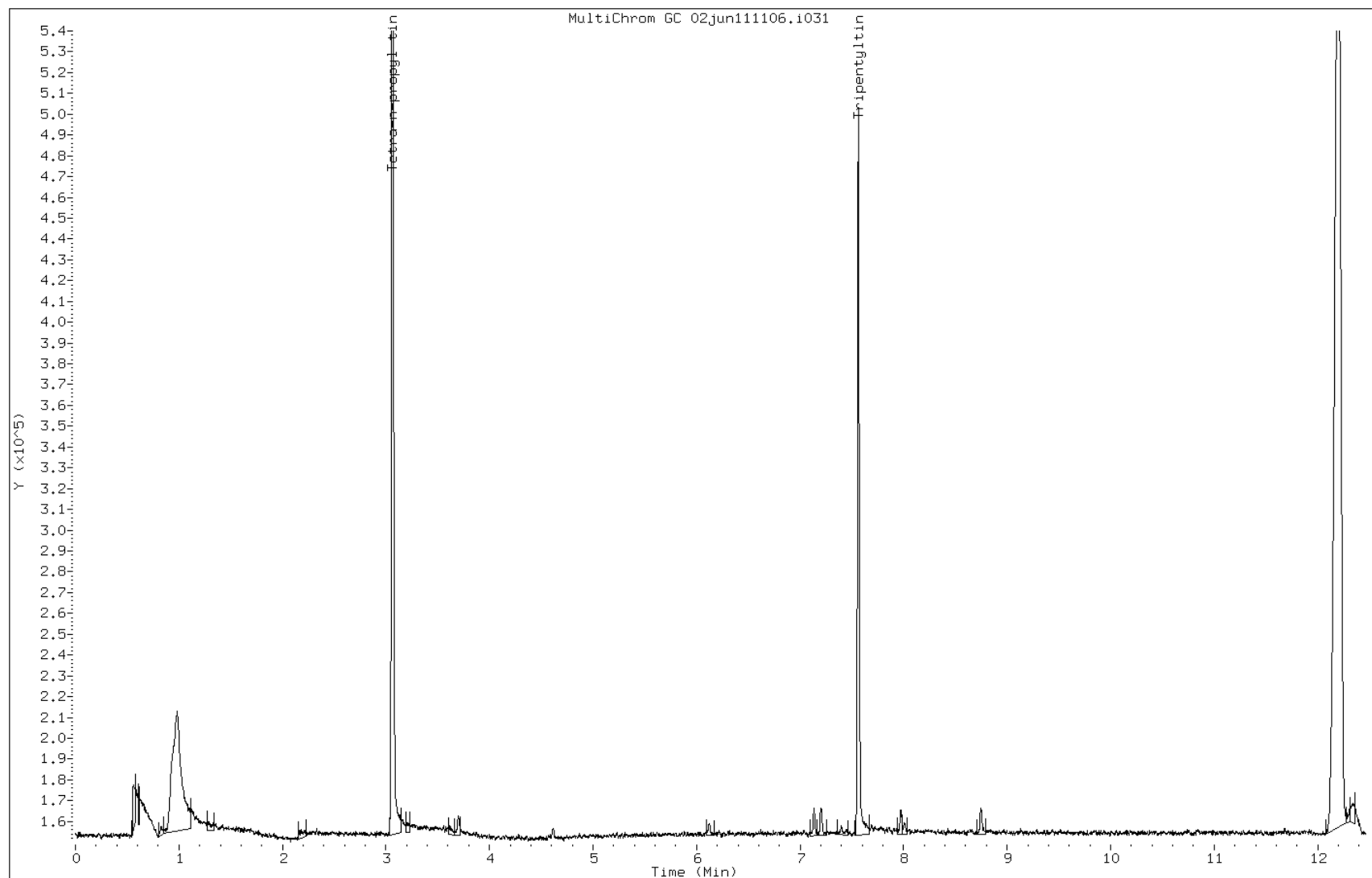
Cpnd Variable Local Compound Variable

		CONCENTRATIONS	
		ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
* 1 Tetra-n-propyl tin CAS #: 2176-98-9			
3.063	3.017 (1.000)	713272	500.000

\$ 5 Triphenyltin		CAS #: 3342-67-4	
7.563	7.554 (2.469)	439526	456.497
		456.5	

Data File: 02jun111106-r031.d
Client ID: SED-035-SIV-SDMS
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: 200-5311-A-1-A
Lab Sample ID: 200-5311-1

Date: 02-JUN-2011 15:15
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: SED-035-SIV-SDMS Lab Sample ID: 200-5311-1
Matrix: Solid Lab File ID: 02jun111106-r031.d
Analysis Method: Organotins/GC Date Collected: 05/23/2011 15:00
Extraction Method: 3550B Date Extracted: 06/01/2011 17:38
Sample wt/vol: 30.26(g) Date Analyzed: 06/02/2011 15:15
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 1.5(uL) GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: 48.1 GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	91		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1
Client Smp ID: SED-035-SIV-SDMS
Inj Date : 02-JUN-2011 15:15
Operator : WBR
Smp Info : 200-5311-A-1-A
Misc Info : 200-5311-A-1-A
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5
Inst ID: 2860_2.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
Compound Sublist: all.sub
Sample Matrix: SOIL

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

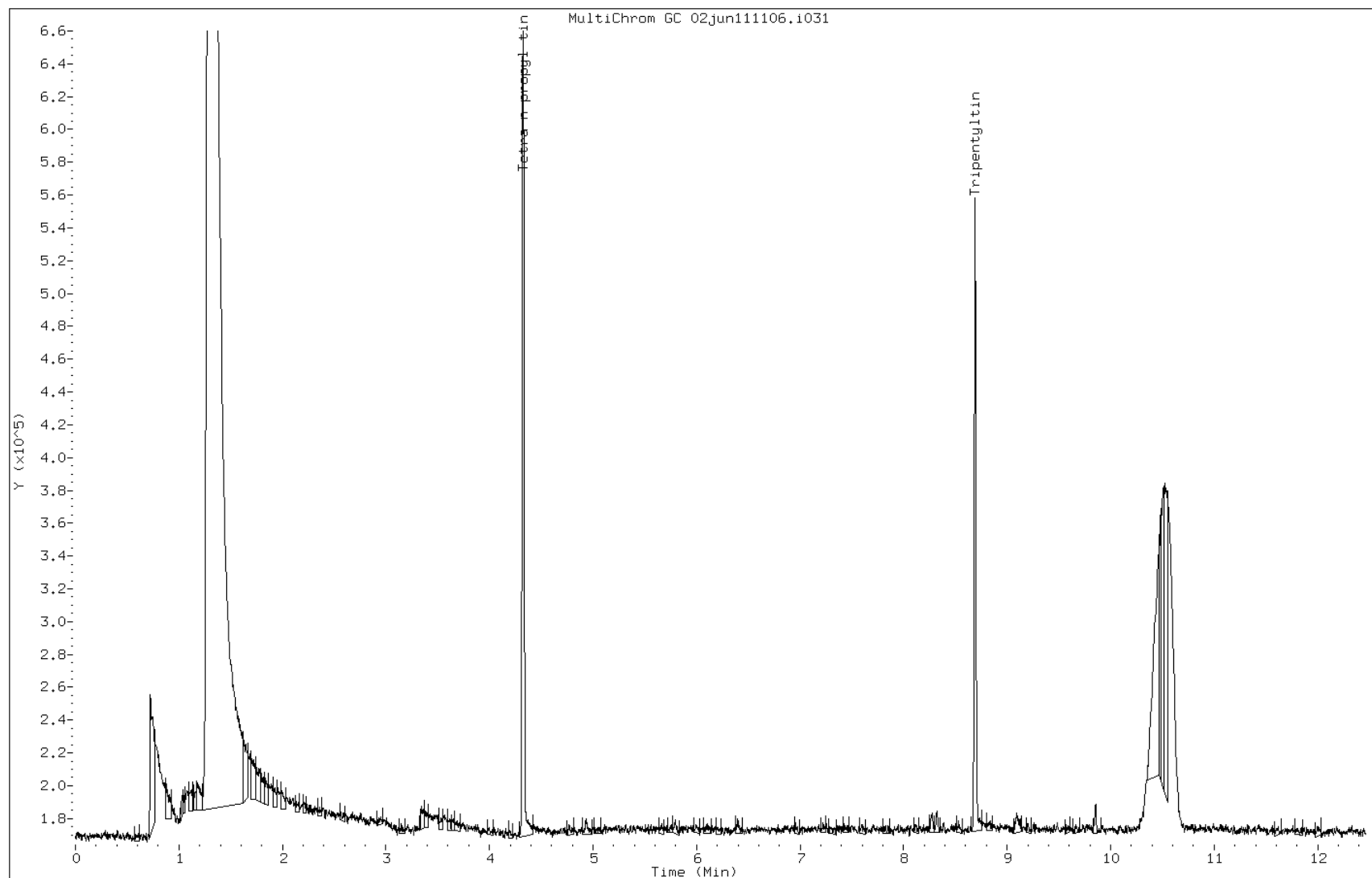
Cpnd Variable Local Compound Variable

			CONCENTRATIONS	
RT	EXP RT (REL RT)		ON-COL	FINAL
==	=====		RESPONSE (ug/L)	(ug/L)
			=====	=====
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
4.325	4.300 (1.000)		674965	500.000

\$ 5 Triphenyltin				CAS #: 3342-67-4
8.692	8.683 (2.010)		462531	410.149
			410.1	

Data File: 02jun111106-r031.d
Client ID: SED-035-SIV-SDMS
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: 200-5311-A-1-A
Lab Sample ID: 200-5311-1

Date: 02-JUN-2011 15:15
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-5311-1</u>
SDG No.: <u>5311</u>	
Client Sample ID: <u>DUP03-SIV-QC-052311</u>	Lab Sample ID: <u>200-5311-2</u>
Matrix: <u>Solid</u>	Lab File ID: <u>02jun111106-r051.d</u>
Analysis Method: <u>Organotins/GC</u>	Date Collected: <u>05/23/2011 15:10</u>
Extraction Method: <u>3550B</u>	Date Extracted: <u>06/01/2011 17:38</u>
Sample wt/vol: <u>30.78(g)</u>	Date Analyzed: <u>06/02/2011 15:49</u>
Con. Extract Vol.: <u>1000(uL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1.5(uL)</u>	GC Column: <u>RTX-35</u> ID: <u>0.32 (mm)</u>
% Moisture: <u>45.9</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>19104</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	3.1	U	3.1	0.79
688-73-3	Tributyltin	2.7	U	2.7	1.2
1002-53-5	Dibutyltin	2.3	U	2.3	0.72
2406-65-7	Monobutyltin	9.0	U J	9.0	9.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	95		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-2
Client Smp ID: DUP03-SIV-QC-052311
Inj Date : 02-JUN-2011 15:49
Operator : WBR
Smp Info : 200-5311-A-2-A
Misc Info : 200-5311-A-2-A
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5
Inst ID: 2860_1.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
Compound Sublist: all.sub
Sample Matrix: SOIL

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		CONCENTRATIONS		
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
3.068	3.017 (0.000)	703744	500.000	(M)

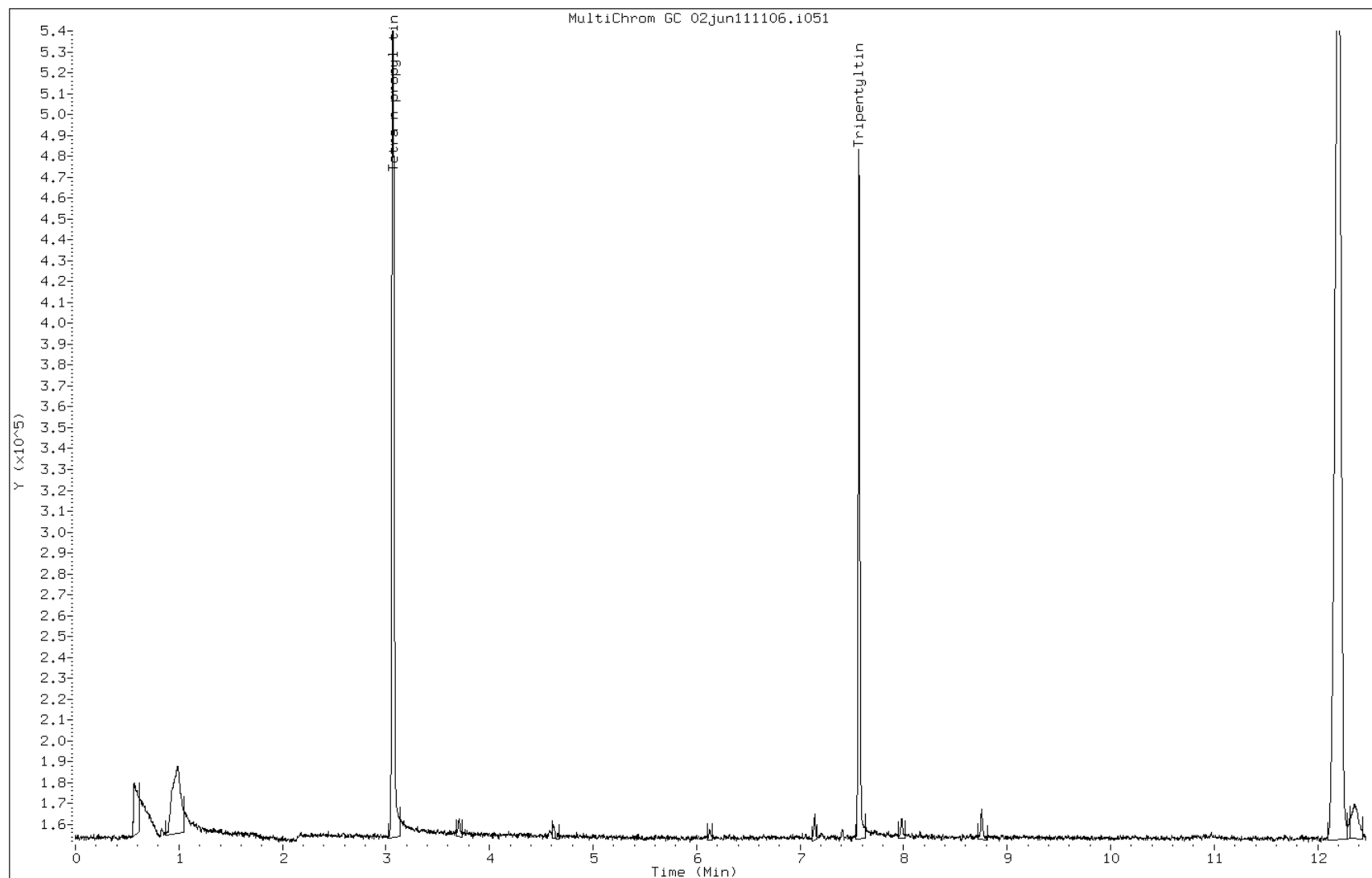
\$ 5	Triphenyltin			CAS #: 3342-67-4
7.570	7.554 (1.000)	407373	428.831	428.8

QC Flag Legend

M - Compound response manually integrated.

Data File: 02jun111106-r051.d
Client ID: DUP03-SIV-QC-052311
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: 200-5311-A-2-A
Lab Sample ID: 200-5311-2

Date: 02-JUN-2011 15:49
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-5311-1</u>
SDG No.: <u>5311</u>	
Client Sample ID: <u>DUP03-SIV-QC-052311</u>	Lab Sample ID: <u>200-5311-2</u>
Matrix: <u>Solid</u>	Lab File ID: <u>02jun111106-r051.d</u>
Analysis Method: <u>Organotins/GC</u>	Date Collected: <u>05/23/2011 15:10</u>
Extraction Method: <u>3550B</u>	Date Extracted: <u>06/01/2011 17:38</u>
Sample wt/vol: <u>30.78(g)</u>	Date Analyzed: <u>06/02/2011 15:49</u>
Con. Extract Vol.: <u>1000(uL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1.5(uL)</u>	GC Column: <u>RTX-5</u> ID: <u>0.32(mm)</u>
% Moisture: <u>45.9</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>19104</u>	Units: <u>ug/Kg</u>

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	90		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-2
Client Smp ID: DUP03-SIV-QC-052311
Inj Date : 02-JUN-2011 15:49
Operator : WBR
Smp Info : 200-5311-A-2-A
Misc Info : 200-5311-A-2-A
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5
Inst ID: 2860_2.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
Compound Sublist: all.sub
Sample Matrix: SOIL

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

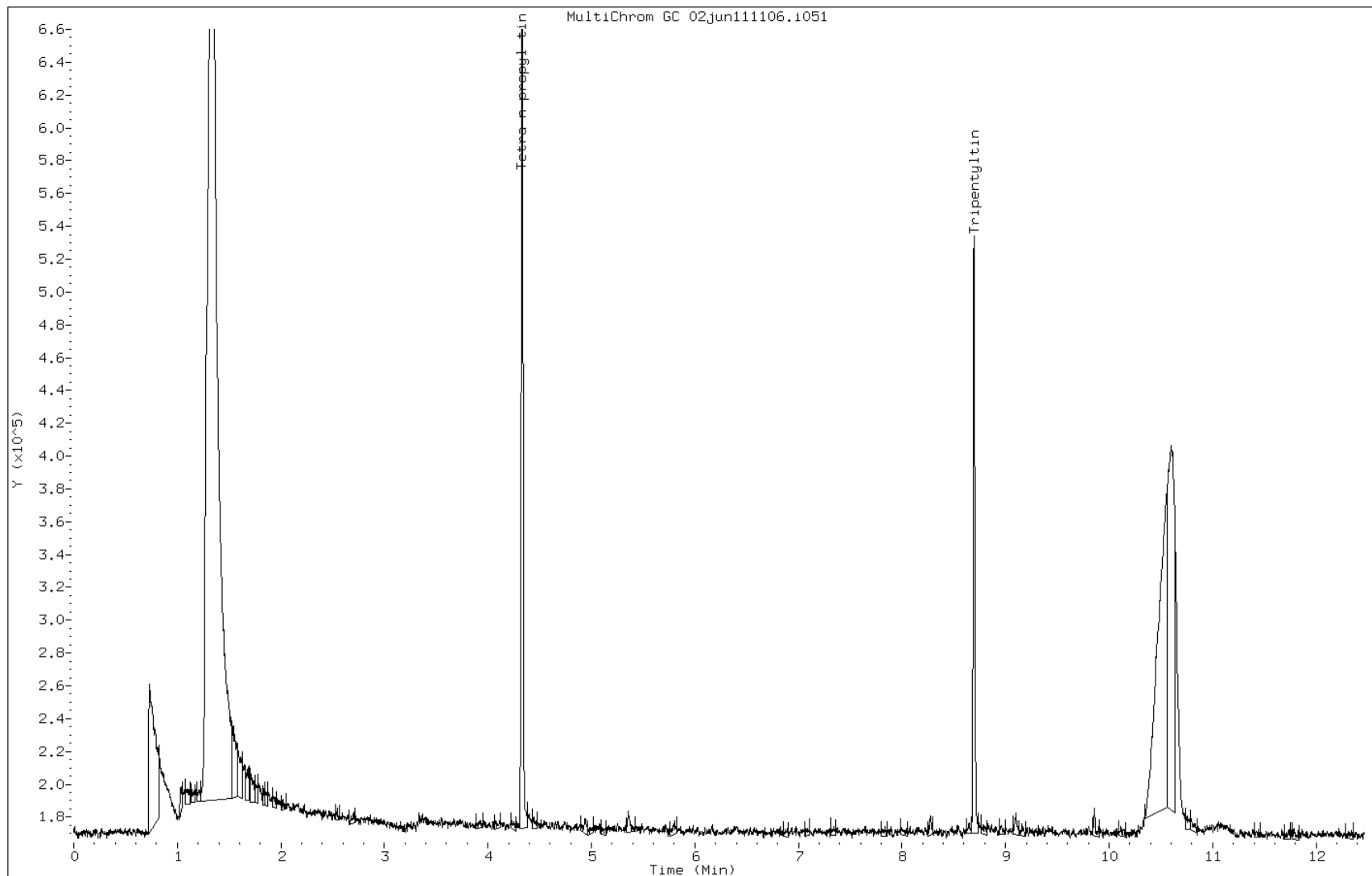
Cpnd Variable Local Compound Variable

			CONCENTRATIONS	
RT	EXP RT (REL RT)		ON-COL	FINAL
		RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
4.329	4.300 (1.000)	637681	500.000	

\$ 5	Tripentyltin			CAS #: 3342-67-4
8.696	8.683 (2.009)	429763	403.373	403.4

Data File: 02jun111106-r051.d
Client ID: DUP03-SIV-QC-052311
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: 200-5311-A-2-A
Lab Sample ID: 200-5311-2

Date: 02-JUN-2011 15:49
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-5311-1</u>
SDG No.: <u>5311</u>	
Client Sample ID: <u>FB08-SIV-052311</u>	Lab Sample ID: <u>200-5311-3</u>
Matrix: <u>Water</u>	Lab File ID: <u>02jun111106-r101.d</u>
Analysis Method: <u>Organotins/GC</u>	Date Collected: <u>05/23/2011 16:00</u>
Extraction Method: <u>3510C</u>	Date Extracted: <u>05/26/2011 20:40</u>
Sample wt/vol: <u>1040 (mL)</u>	Date Analyzed: <u>06/02/2011 17:13</u>
Con. Extract Vol.: <u>1000 (uL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1.5 (uL)</u>	GC Column: <u>RTX-35</u> ID: <u>0.32 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>19104</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	0.048	U	0.048	0.012
688-73-3	Tributyltin	0.043	U	0.043	0.012
1002-53-5	Dibutyltin	0.038	U	0.038	0.0081
2406-65-7	Monobutyltin	0.48	U J *	0.48	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	91		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-3
Client Smp ID: FB07-SIV-SS-052311
Inj Date : 02-JUN-2011 17:13
Operator : WBR
Smp Info : 200-5311-A-3-A
Misc Info : 200-5311-A-3-A
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5
Inst ID: 2860_1.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
Compound Sublist: all.sub
Sample Matrix: WATER

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		CONCENTRATIONS	
		ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
* 1 Tetra-n-propyl tin CAS #: 2176-98-9			
3.072	3.017 (0.000)	738870 500.000	(M)

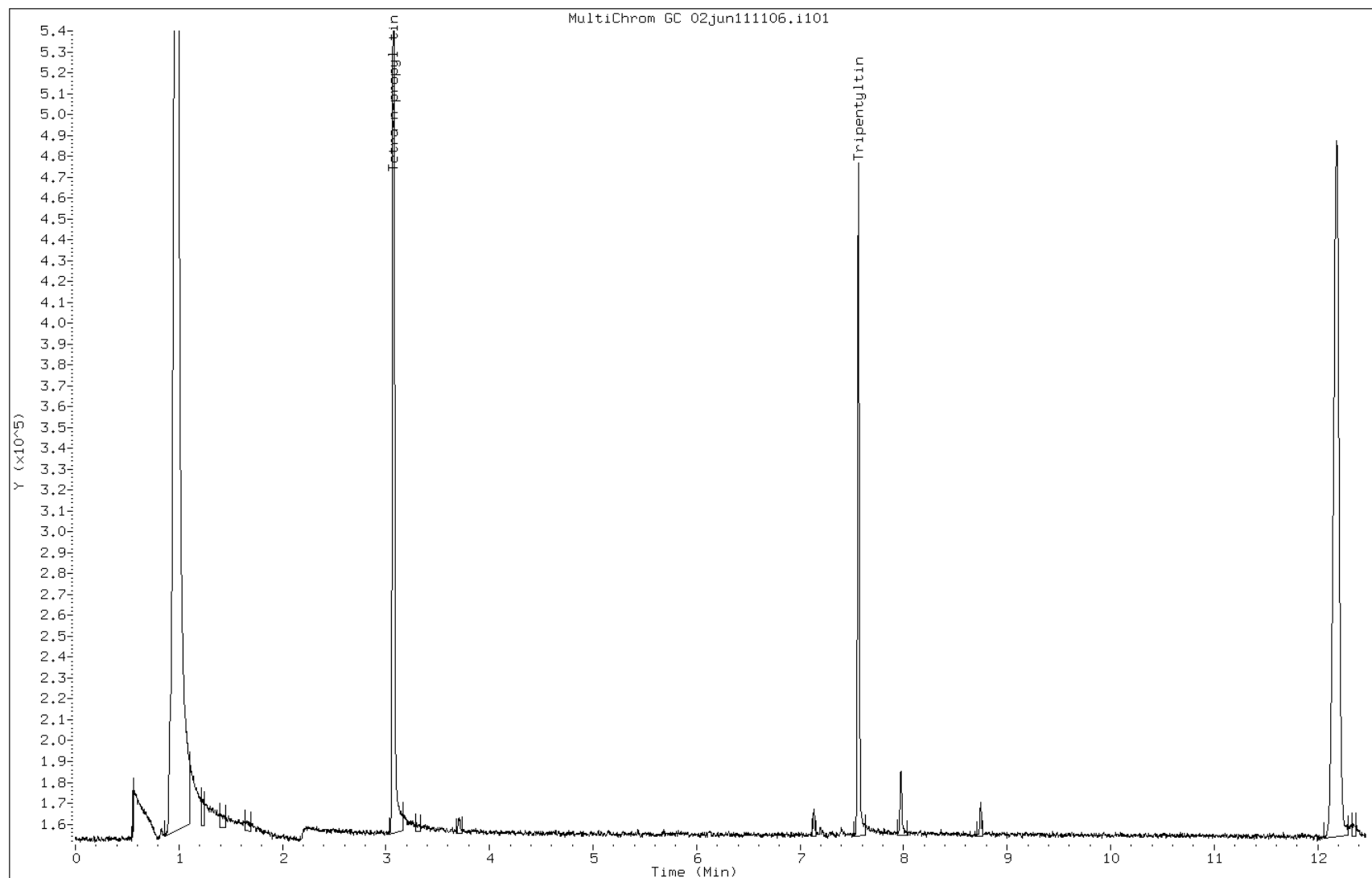
\$ 5 Triphenyltin		CAS #: 3342-67-4	
7.563	7.554 (1.000)	407113 408.184	408.2

QC Flag Legend

M - Compound response manually integrated.

Data File: 02jun111106-r101.d
Client ID: FB07-SIV-SS-052311
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: 200-5311-A-3-A
Lab Sample ID: 200-5311-3

Date: 02-JUN-2011 17:13
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: FB08-SIV-052311 Lab Sample ID: 200-5311-3
Matrix: Water Lab File ID: 02jun111106-r101.d
Analysis Method: Organotins/GC Date Collected: 05/23/2011 16:00
Extraction Method: 3510C Date Extracted: 05/26/2011 20:40
Sample wt/vol: 1040 (mL) Date Analyzed: 06/02/2011 17:13
Con. Extract Vol.: 1000 (uL) Dilution Factor: 1
Injection Volume: 1.5 (uL) GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	88		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-3
Client Smp ID: FB07-SIV-SS-052311
Inj Date : 02-JUN-2011 17:13
Operator : WBR
Smp Info : 200-5311-A-3-A
Misc Info : 200-5311-A-3-A
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5

Inst ID: 2860_2.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
Compound Sublist: all.sub
Sample Matrix: WATER

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

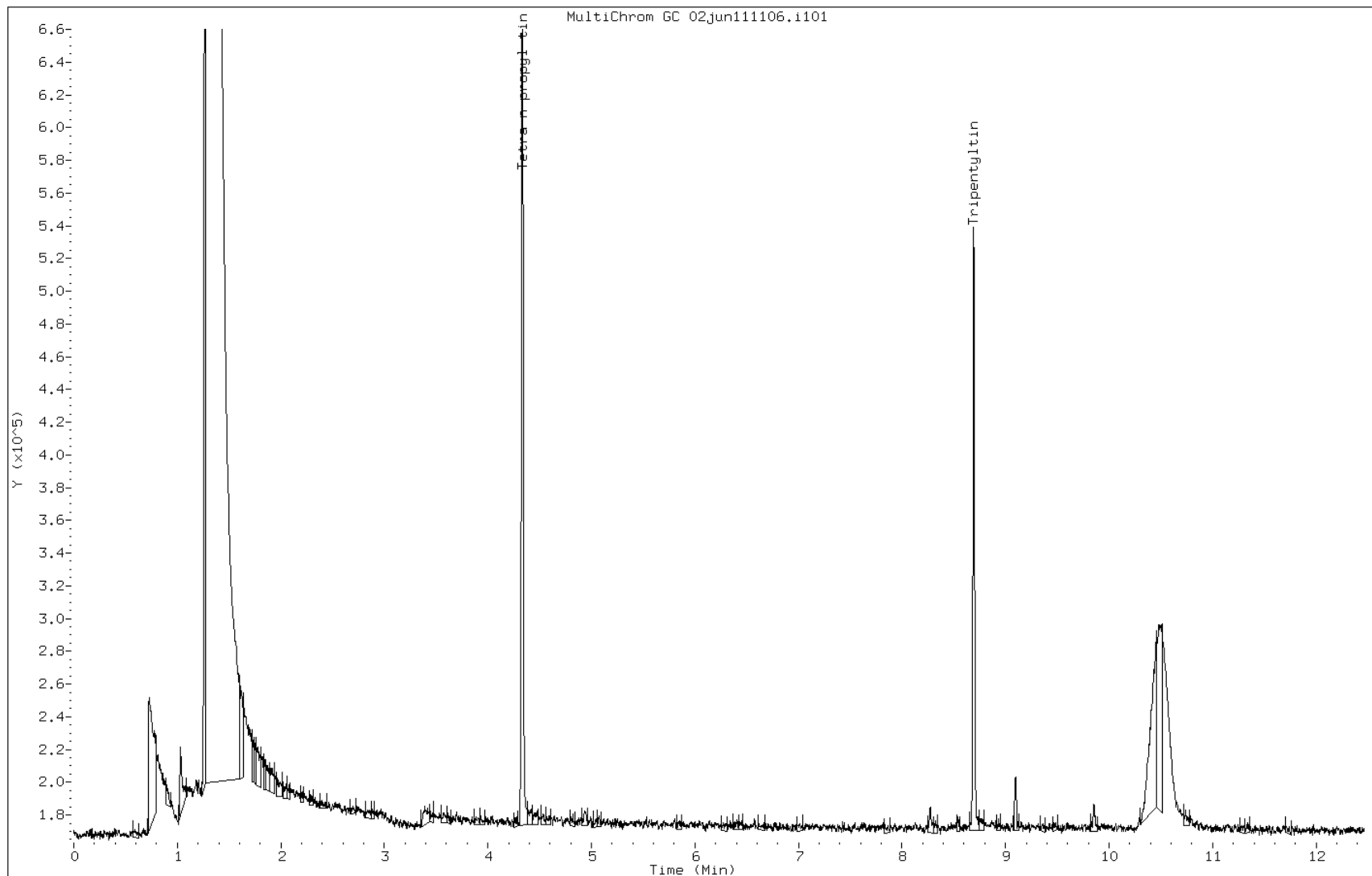
Cpnd Variable Local Compound Variable

		CONCENTRATIONS	
		ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
* 1	Tetra-n-propyl tin		CAS #: 2176-98-9
4.334	4.300 (1.000)	655379	500.000

\$ 5	Tripentyltin		CAS #: 3342-67-4
8.694	8.683 (2.006)	433640	396.021
		396.0	

Data File: 02jun111106-r101.d
Client ID: FB07-SIV-SS-052311
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: 200-5311-A-3-A
Lab Sample ID: 200-5311-3

Date: 02-JUN-2011 17:13
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Burlington Job No.: 200-5311-1 Analy Batch No.: 19102

SDG No.: 5311

Instrument ID: 2860.i GC Column: RTX-35 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2011 12:42 Calibration End Date: 06/02/2011 13:50 Calibration ID: 7089

Calibration Files:

LEVEL:	LAB SAMPLE ID:	EPA SAMPLE NO:	LAB FILE ID:
Level 1	IC 200-19102/1	50 PPB	02jun110958-r031.d
Level 2	IC 200-19102/2	100 PPB	02jun110958-r041.d
Level 3	ICRT 200-19102/3	250 PPB	02jun110958-r051.d
Level 4	IC 200-19102/4	500 PPB	02jun110958-r061.d
Level 5	IC 200-19102/5	1000 PPB	02jun110958-r071.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrabutyltin	0.6915	0.7116	0.7651	0.6826	0.6565	Ave		0.7015				5.8		20.0			
Tributyltin	0.9906	0.8844	0.9799	0.8431	0.8432	Ave		0.9082				8.0		20.0			
Dibutyltin	1.1675	1.1950	1.1692	1.0501	1.0111	Ave		1.1186				7.4		20.0			
Monobutyltin	0.9592	0.9641	1.1374	0.9628	0.9670	Ave		0.9981				7.8		20.0			
Tripentyltin	0.7116	0.6792	0.7436	0.6045	0.6357	Ave		0.6749				8.3		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-5311-1 Analy Batch No.: 19102

SDG No.: 5311

Instrument ID: 2860.i GC Column: RTX-35 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2011 12:42 Calibration End Date: 06/02/2011 13:50 Calibration ID: 7089

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-19102/1	02jun110958-r031.d
Level 2	IC 200-19102/2	02jun110958-r041.d
Level 3	ICRT 200-19102/3	02jun110958-r051.d
Level 4	IC 200-19102/4	02jun110958-r061.d
Level 5	IC 200-19102/5	02jun110958-r071.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Tetrabutyltin	TPT	Ave	46966	97831	248599	457265	896912	50.0	100	250	500	1000
Tributyltin	TPT	Ave	59879	108207	283983	502686	1025234	44.5	89.0	223	445	890
Dibutyltin	TPT	Ave	61061	126507	293260	541653	1063615	38.5	77.0	193	385	770
Monobutyltin	TPT	Ave	40394	82181	229125	399897	819077	31.0	62.0	155	310	620
Triphenyltin	TPT	Ave	43499	84044	217441	364484	781597	45.0	90.0	225	450	900

Curve Type Legend:

Ave = Average ISTD

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r031.d
Lab Smp Id: IC-131787 Client Smp ID: 50 PPB
Inj Date : 02-JUN-2011 12:42
Operator : WBR Inst ID: 2860_1.i
Smp Info : IC-131787,1,50 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 12:42 Cal File: 02jun110958-r031.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		AMOUNTS		
RT	EXP RT (REL RT)	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	
==	=====	=====	=====	
* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
3.059	3.017 (1.000)	679214	500.000	

2	Tetrabutyltin			CAS #: 1461-25-2
5.287	5.276 (1.728)	46966	50.0000	49.29 (a)

3	Tributyltin			CAS #: 688-73-3
6.304	6.295 (2.061)	59879	44.5000	48.53

4	Dibutyltin			CAS #: 1002-53-5
7.200	7.191 (2.354)	61061	38.5000	40.18

\$ 5	Triphenyltin			CAS #: 3342-67-4
7.561	7.554 (2.472)	43499	45.0000	47.44

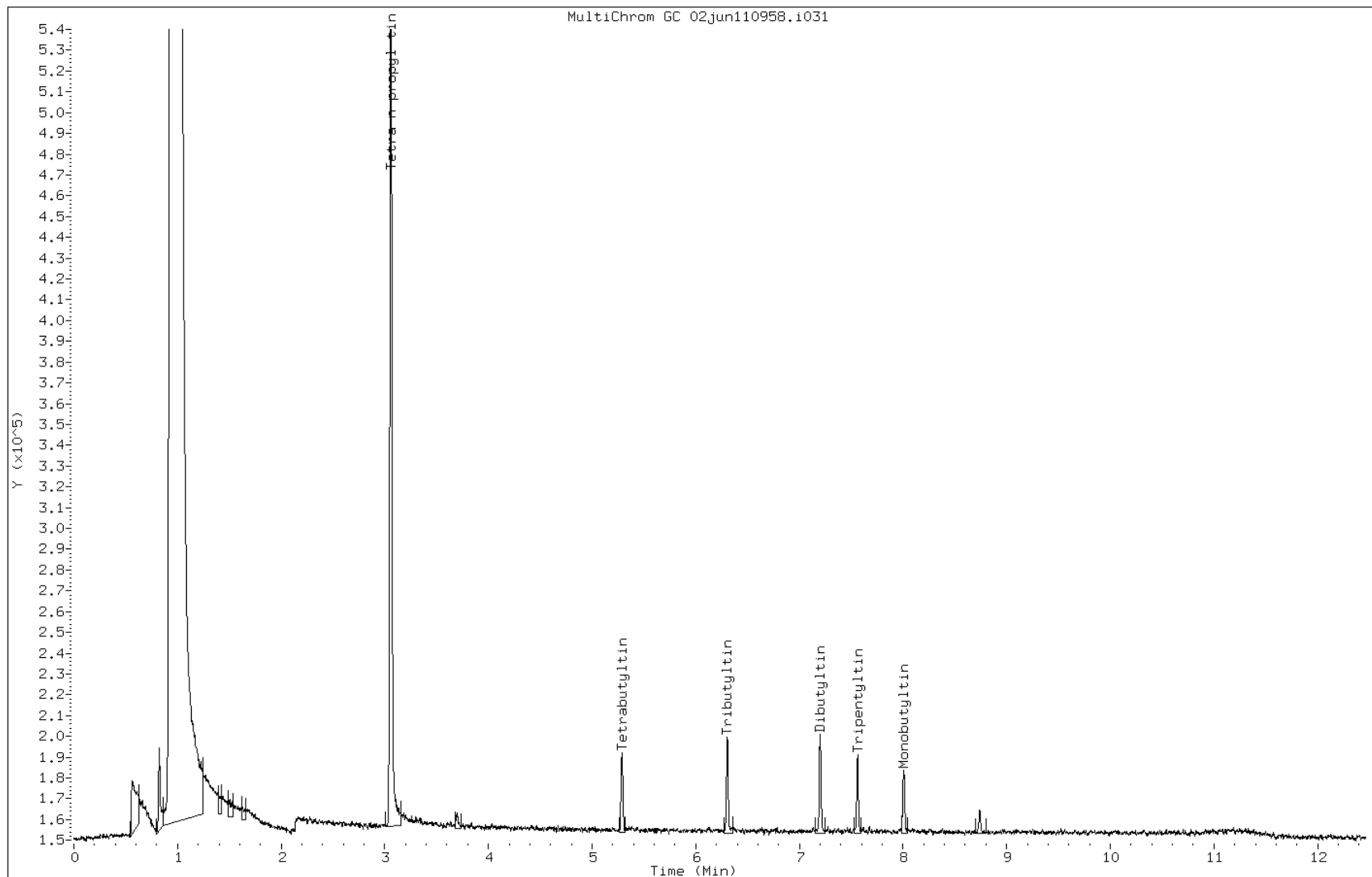
AMOUNTS				
		CAL-AMT	ON-COL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
6 Monobutyltin				
		CAS #: 2406-65-7		
8.004	7.996 (2.617)	40394	31.0000	29.79 (a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: 02jun110958-r031.d
Client ID: 50 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: IC-131787,1,50 PPB
Lab Sample ID: IC-131787

Date: 02-JUN-2011 12:42
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r041.d
Lab Smp Id: IC-131788 Client Smp ID: 100 PPB
Inj Date : 02-JUN-2011 12:59
Operator : WBR Inst ID: 2860_1.i
Smp Info : IC-131788,1,100 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 12:59 Cal File: 02jun110958-r041.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

AMOUNTS				
RT	EXP RT (REL RT)	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	
==	=====	=====	=====	
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
3.063	3.017 (1.000)	687400	500.000	

2 Tetrabutyltin				CAS #: 1461-25-2
5.285	5.276 (1.725)	97831	100.000	101.4

3 Tributyltin				CAS #: 688-73-3
6.300	6.295 (2.056)	108207	89.0000	86.66

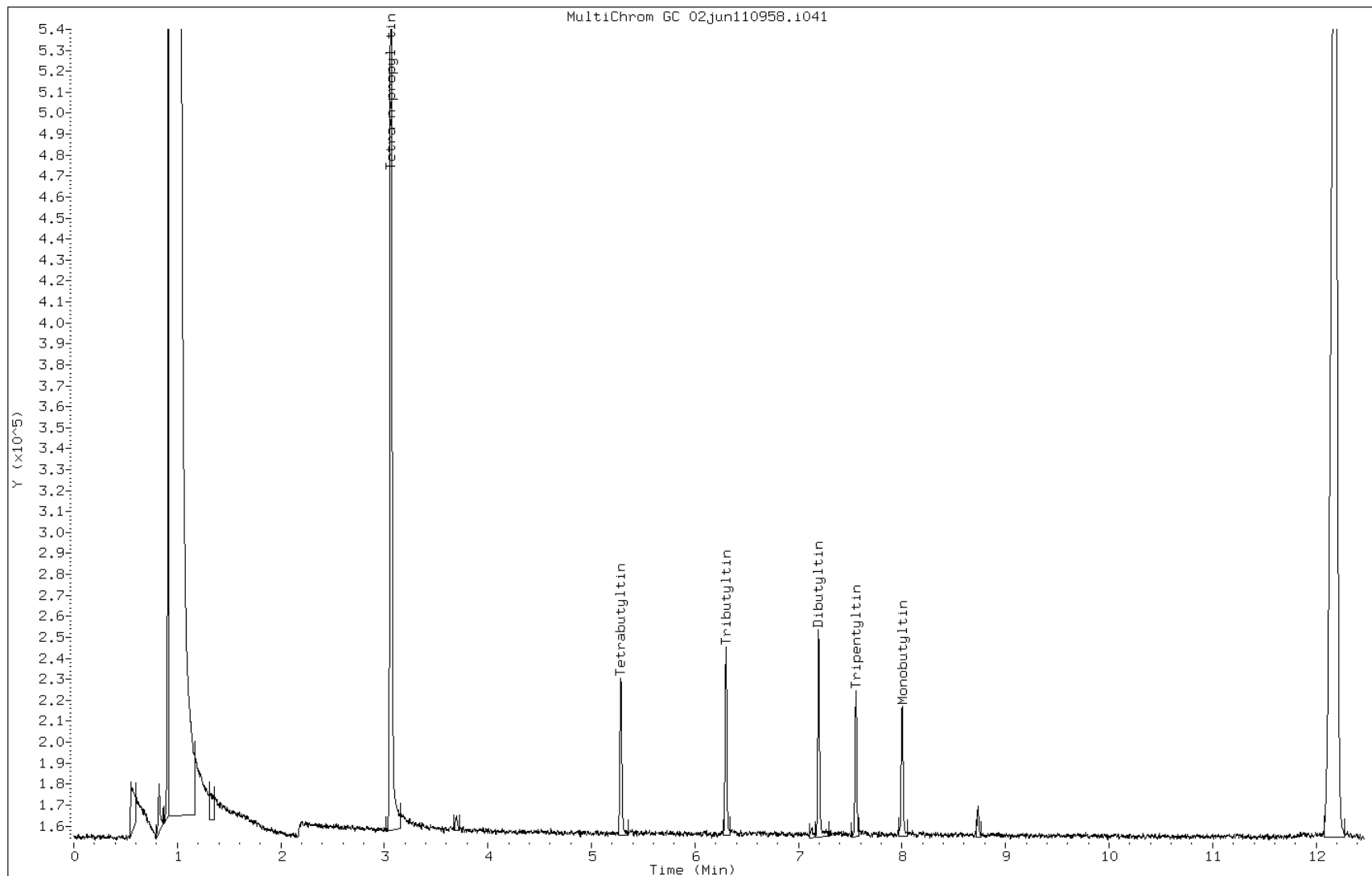
4 Dibutyltin				CAS #: 1002-53-5
7.195	7.191 (2.349)	126507	77.0000	82.26

\$ 5 Triphenyltin				CAS #: 3342-67-4
7.554	7.554 (2.466)	84044	90.0000	90.57

AMOUNTS				
		CAL-AMT	ON-COL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
6 Monobutyltin				
		CAS #: 2406-65-7		
8.002	7.996 (2.612)	82181	62.0000	59.89

Data File: 02jun110958-r041.d
Client ID: 100 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: IC-131788,1,100 PPB
Lab Sample ID: IC-131788

Date: 02-JUN-2011 12:59
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r051.d
Lab Smp Id: ICRT-131789 Client Smp ID: 250 PPB
Inj Date : 02-JUN-2011 13:16
Operator : WBR Inst ID: 2860_1.i
Smp Info : ICRT-131789,1,250 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:16 Cal File: 02jun110958-r051.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

AMOUNTS				
RT	EXP RT (REL RT)	CAL-AMT	ON-COL	
		RESPONSE (ug/L)	(ug/L)	
==	=====	=====	=====	=====
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
3.017	3.017 (1.000)	649807	500.000	

2 Tetrabutyltin				CAS #: 1461-25-2
5.276	5.276 (1.749)	248599	250.000	272.7

3 Tributyltin				CAS #: 688-73-3
6.295	6.295 (2.087)	283983	223.000	240.6

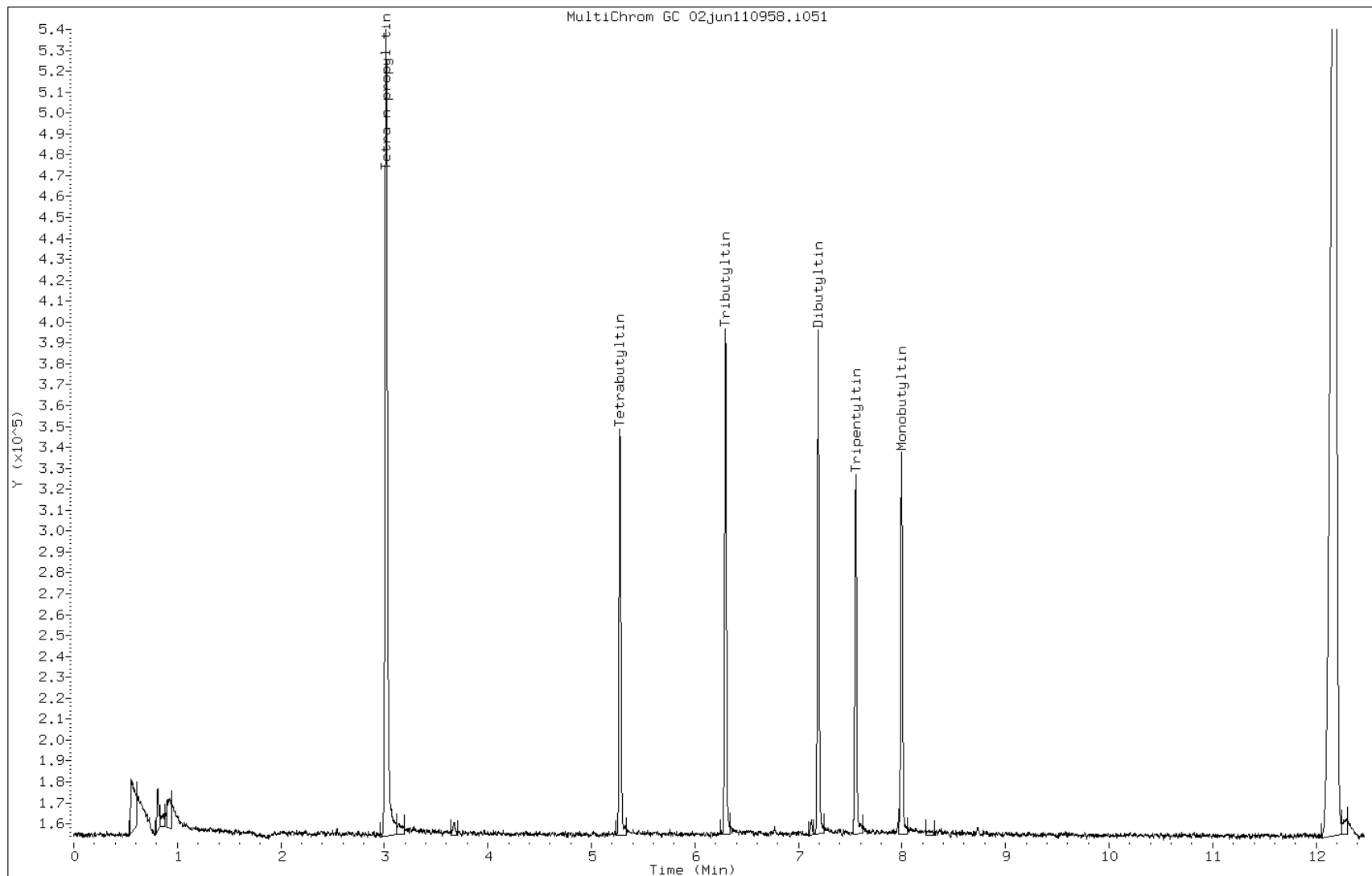
4 Dibutyltin				CAS #: 1002-53-5
7.191	7.191 (2.384)	293260	193.000	201.7

\$ 5 Triphenyltin				CAS #: 3342-67-4
7.554	7.554 (2.504)	217441	225.000	247.9

AMOUNTS				
		CAL-AMT	ON-COL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)	
==	=====	=====	=====	=====
6 Monobutyltin			CAS #: 2406-65-7	
7.996	7.996 (2.650)	229125 155.000	176.6	

Data File: 02jun110958-r051.d
Client ID: 250 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: ICRT-131789,1,250 PPB
Lab Sample ID: ICRT-131789

Date: 02-JUN-2011 13:16
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r061.d
Lab Smp Id: IC-131790 Client Smp ID: 500 PPB
Inj Date : 02-JUN-2011 13:33
Operator : WBR Inst ID: 2860_1.i
Smp Info : IC-131790,1,500 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:33 Cal File: 02jun110958-r061.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		AMOUNTS		
RT	EXP RT (REL RT)	CAL-AMT	ON-COL	
==	=====	RESPONSE (ug/L)	(ug/L)	
==	=====	=====	=====	=====
* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
3.061	3.017 (1.000)	669893	500.000	

2	Tetrabutyltin			CAS #: 1461-25-2
5.285	5.276 (1.726)	457265	500.000	486.5

3	Tributyltin			CAS #: 688-73-3
6.300	6.295 (2.058)	502686	445.000	413.1

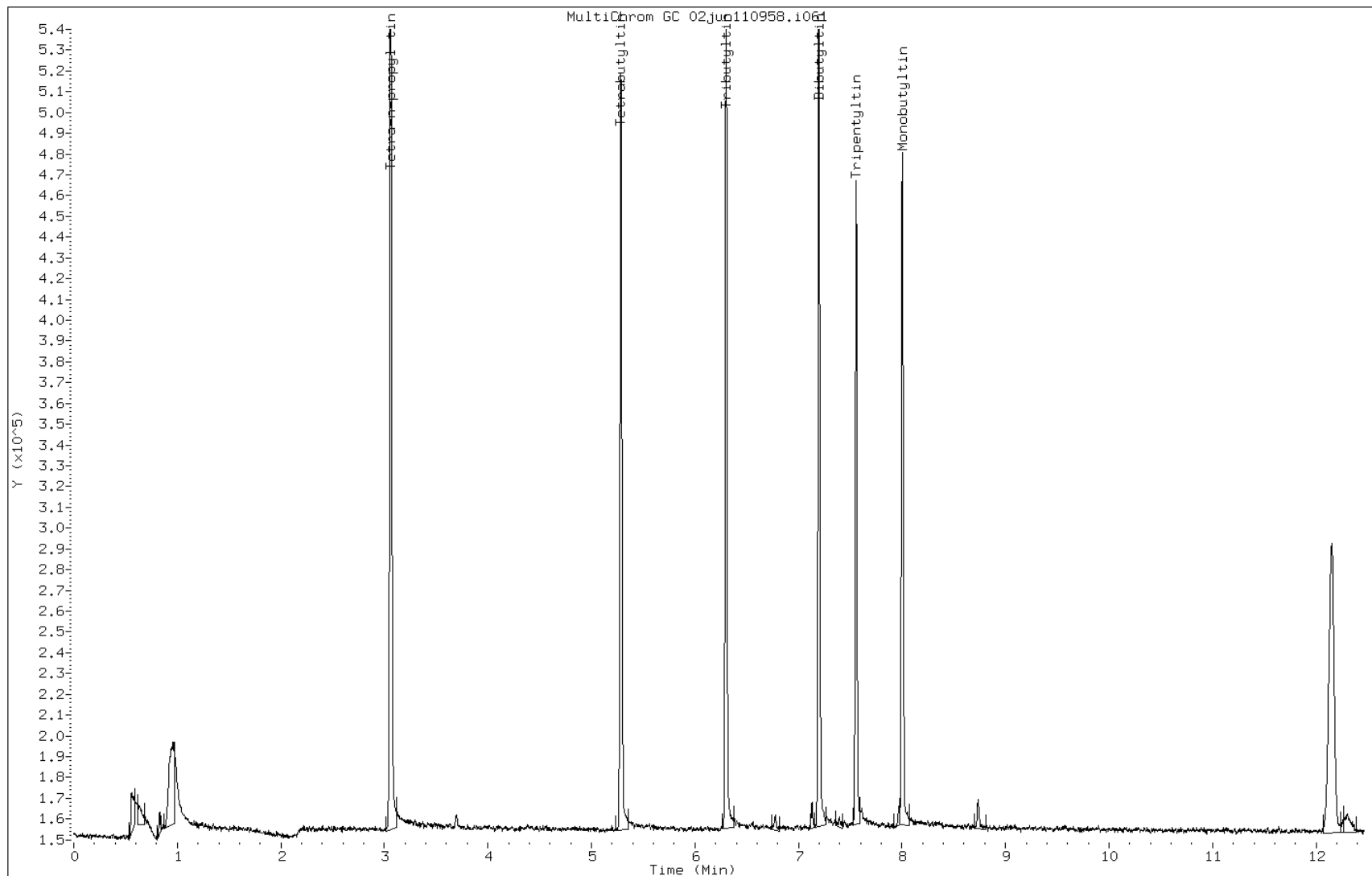
4	Dibutyltin			CAS #: 1002-53-5
7.198	7.191 (2.351)	541653	385.000	361.4

\$ 5	Triphenyltin			CAS #: 3342-67-4
7.557	7.554 (2.469)	364484	450.000	403.1

AMOUNTS				
		CAL-AMT	ON-COL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
6 Monobutyltin				
		CAS #: 2406-65-7		
8.004	7.996 (2.615)	399897	310.000	299.0

Data File: 02jun110958-r061.d
Client ID: 500 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: IC-131790, 1,500 PPB
Lab Sample ID: IC-131790

Date: 02-JUN-2011 13:33
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r071.d
Lab Smp Id: IC-131791 Client Smp ID: 1000 PPB
Inj Date : 02-JUN-2011 13:50
Operator : WBR Inst ID: 2860_1.i
Smp Info : IC-131791,1,1000 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		AMOUNTS		
RT	EXP RT (REL RT)	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	
==	=====	=====	=====	
* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
3.072	3.017 (0.000)	683080	500.000	(M)

2	Tetrabutyltin			CAS #: 1461-25-2
5.298	5.276 (1.000)	896912	1000.00	935.9

3	Tributyltin			CAS #: 688-73-3
6.315	6.295 (1.000)	1025234	890.000	826.3

4	Dibutyltin			CAS #: 1002-53-5
7.211	7.191 (1.000)	1063615	770.000	696.0

\$ 5	Triphenyltin			CAS #: 3342-67-4
7.570	7.554 (1.000)	781597	900.000	847.7

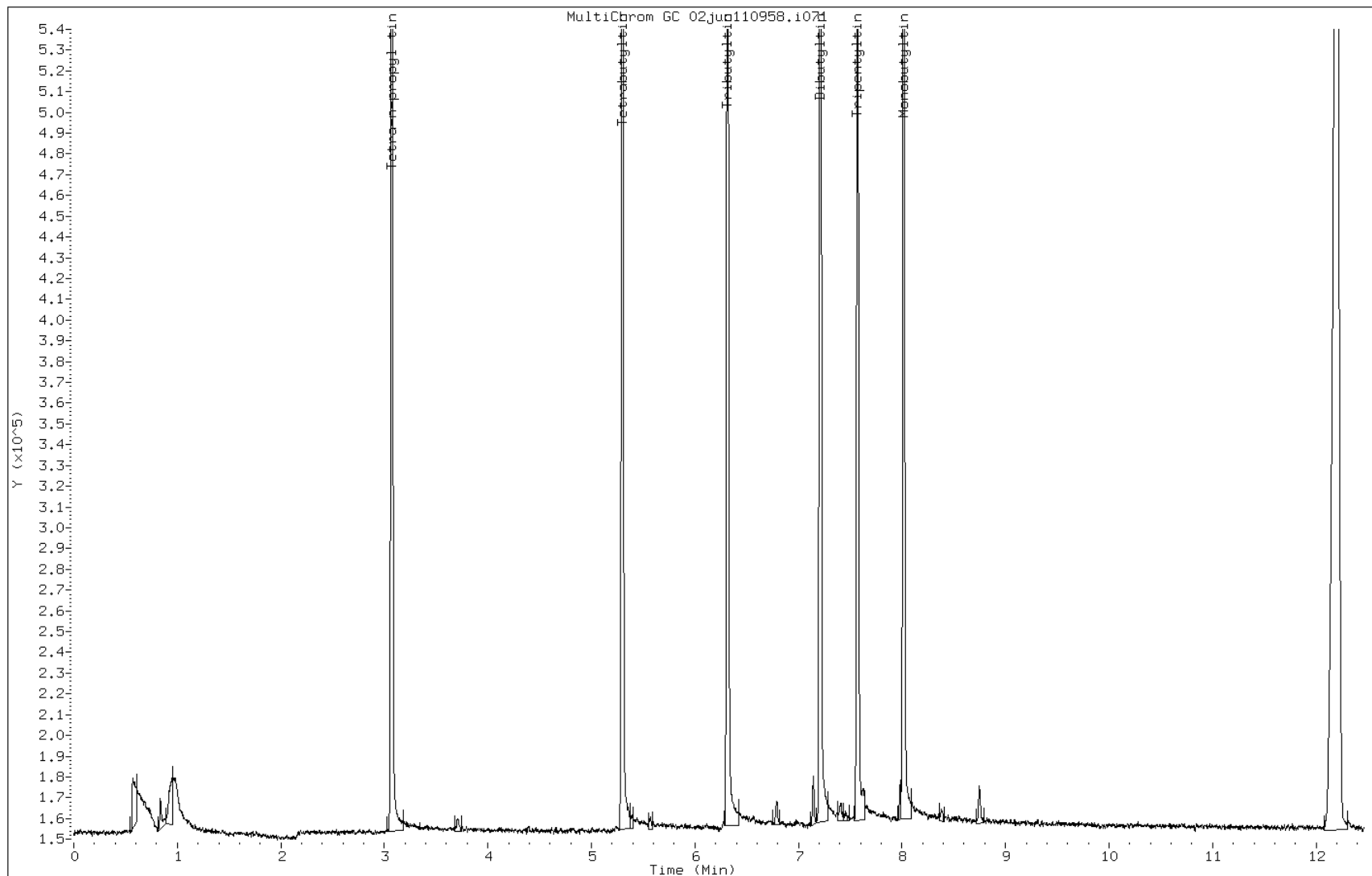
AMOUNTS				
		CAL-AMT	ON-COL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
6 Monobutyltin				
		CAS #: 2406-65-7		
8.015	7.996 (1.000)	819077	620.000	600.7 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: 02jun110958-r071.d
Client ID: 1000 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: IC-131791,1,1000 PPB
Lab Sample ID: IC-131791

Date: 02-JUN-2011 13:50
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32

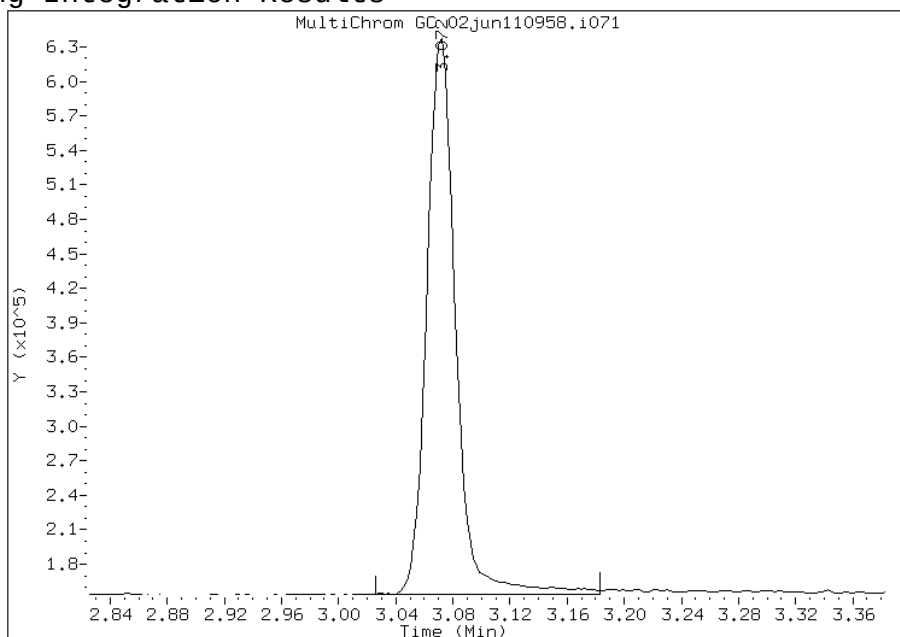


Manual Integration Report

Data File: 02jun110958-r071.d
Lab Sample ID: IC-131791
Inj. Date and Time: 02-JUN-2011 13:50
Instrument ID: 2860_1.i
Client ID: 1000 PPB
Compound: 1 Tetra-n-propyl tin
CAS #: 2176-98-9
Report Date: 06/06/2011

Processing Integration Results

Not Detected



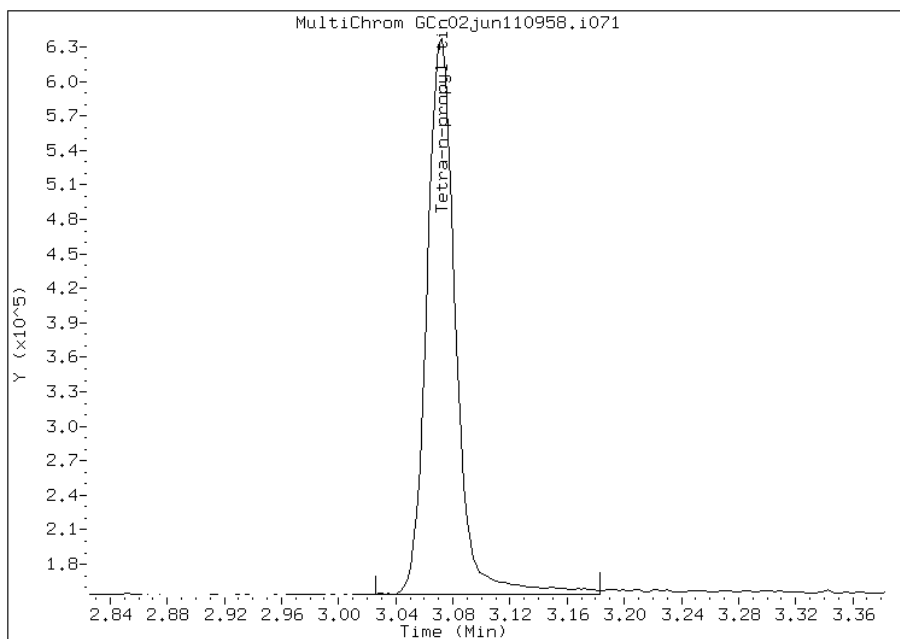
Manual Integration Results

RT: 3.07

Response: 683080

Amount: 500.00

Conc: 500.00



File Uploaded By: wbr

Manual Integration Reason: Peak not found by the data system

Manual Integration Report

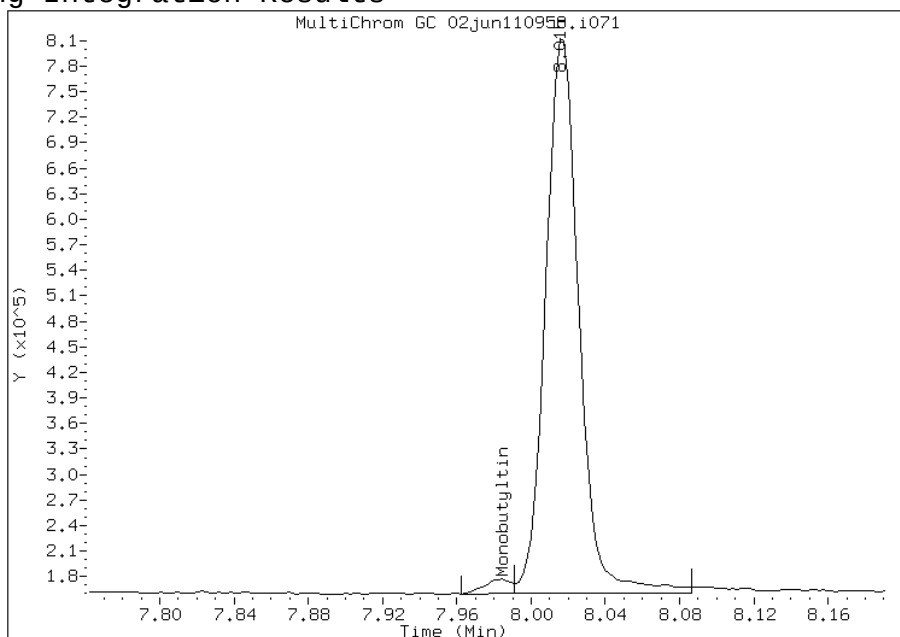
Data File: 02jun110958-r071.d
Lab Sample ID: IC-131791
Inj. Date and Time: 02-JUN-2011 13:50
Instrument ID: 2860_1.i
Client ID: 1000 PPB
Compound: 6 Monobutyltin
CAS #: 2406-65-7
Report Date: 06/06/2011

RT: 7.98 Processing Integration Results

Response: 17269

Amount: 0.000000

Conc: 0.000000



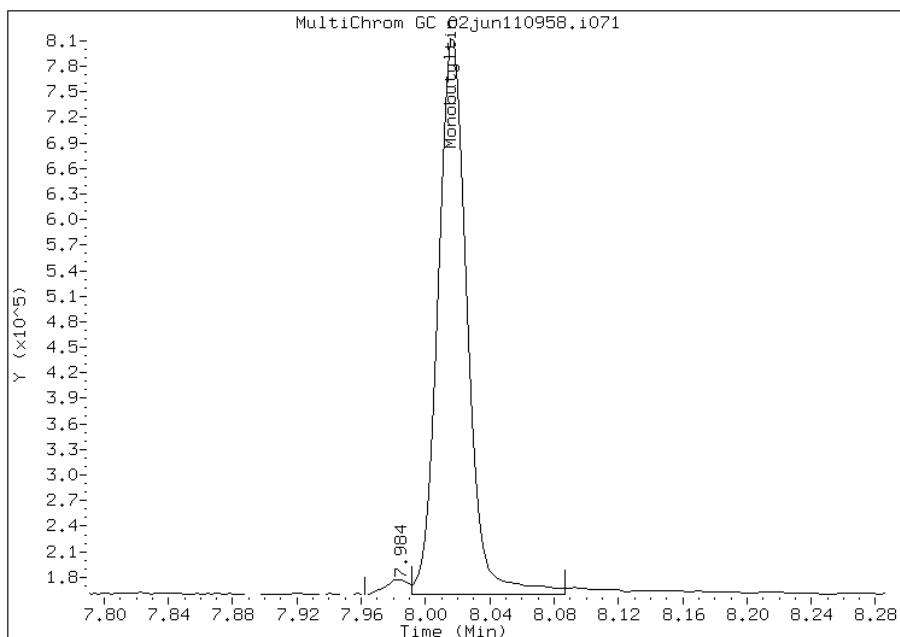
Manual Integration Results

RT: 8.02

Response: 819077

Amount: 600.67

Conc: 600.70



File Uploaded By: wbr

Manual Integration Reason: Analyte misidentified by the data system

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Burlington Job No.: 200-5311-1 Analy Batch No.: 19102

SDG No.: 5311

Instrument ID: 2860.i GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2011 12:42 Calibration End Date: 06/02/2011 13:50 Calibration ID: 7090

Calibration Files:

LEVEL:	LAB SAMPLE ID:	EPA SAMPLE NO:	LAB FILE ID:
Level 1	IC 200-19102/1	50 PPB	02jun110958-r031.d
Level 2	IC 200-19102/2	100 PPB	02jun110958-r041.d
Level 3	ICRT 200-19102/3	250 PPB	02jun110958-r051.d
Level 4	IC 200-19102/4	500 PPB	02jun110958-r061.d
Level 5	IC 200-19102/5	1000 PPB	02jun110958-r071.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrabutyltin	0.9303	0.7912	0.7031	0.6841	0.6678	Ave		0.7553				14.4		20.0			
Tributyltin	1.1226	1.0552	0.9361	0.8999	0.8555	Ave		0.9739				11.4		20.0			
Dibutyltin	1.2172	1.3212	1.1095	1.0959	1.0334	Ave		1.1554				9.9		20.0			
Monobutyltin	1.2526	1.1988	1.2231	1.1480	1.1904	Ave		1.2026				3.2		20.0			
Triphenyltin	0.9322	0.8587	0.8600	0.7623	0.7639	Ave		0.8354				8.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-5311-1 Analy Batch No.: 19102

SDG No.: 5311

Instrument ID: 2860.i GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2011 12:42 Calibration End Date: 06/02/2011 13:50 Calibration ID: 7090

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-19102/1	02jun110958-r031.d
Level 2	IC 200-19102/2	02jun110958-r041.d
Level 3	ICRT 200-19102/3	02jun110958-r051.d
Level 4	IC 200-19102/4	02jun110958-r061.d
Level 5	IC 200-19102/5	02jun110958-r071.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Tetrabutyltin	TPT	Ave	58318	93547	230088	422704	849402	50.0	100	250	500	1000
Tributyltin	TPT	Ave	62634	111035	273273	494869	968495	44.5	89.0	223	445	890
Dibutyltin	TPT	Ave	58752	120285	280302	521383	1012080	38.5	77.0	193	385	770
Monobutyltin	TPT	Ave	48684	87874	248166	439786	938748	31.0	62.0	155	310	620
Triphenyltin	TPT	Ave	52591	91372	253291	423892	874446	45.0	90.0	225	450	900

Curve Type Legend:

Ave = Average ISTD

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r031.d
Lab Smp Id: IC-131787 Client Smp ID: 50 PPB
Inj Date : 02-JUN-2011 12:42
Operator : WBR Inst ID: 2860_2.i
Smp Info : IC-131787,1,50 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:36 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 12:42 Cal File: 02jun110958-r031.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

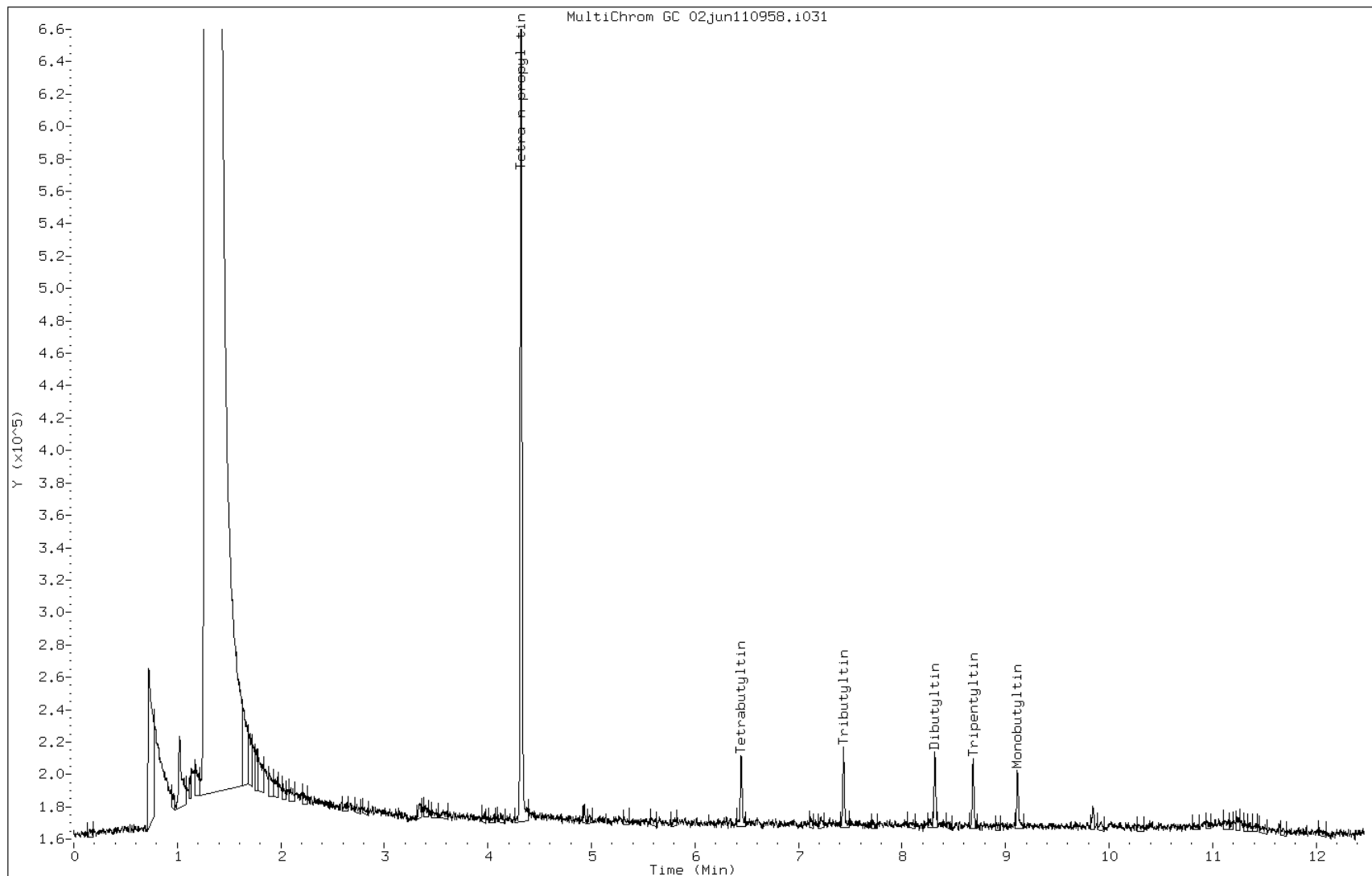
Cpnd Variable Local Compound Variable

AMOUNTS				
RT	EXP RT (REL RT)	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	
==	=====	=====	=====	
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
4.320	4.300 (1.000)	626869	500.000	
2 Tetrabutyltin				CAS #: 1461-25-2
6.446	6.439 (1.492)	58318	50.0000	61.59
3 Tributyltin				CAS #: 688-73-3
7.437	7.430 (1.721)	62634	44.5000	51.30
4 Dibutyltin				CAS #: 1002-53-5
8.317	8.310 (1.925)	58752	38.5000	40.56
\$ 5 Triphenyltin				CAS #: 3342-67-4
8.687	8.683 (2.011)	52591	45.0000	50.21

AMOUNTS				
		CAL-AMT	ON-COL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
6 Monobutyltin				
		CAS #: 2406-65-7		
9.115	9.111 (2.110)	48684	31.0000	32.29

Data File: 02jun110958-r031.d
Client ID: 50 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: IC-131787,1,50 PPB
Lab Sample ID: IC-131787

Date: 02-JUN-2011 12:42
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r041.d
Lab Smp Id: IC-131788 Client Smp ID: 100 PPB
Inj Date : 02-JUN-2011 12:59
Operator : WBR Inst ID: 2860_2.i
Smp Info : IC-131788,1,100 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:36 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 12:59 Cal File: 02jun110958-r041.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

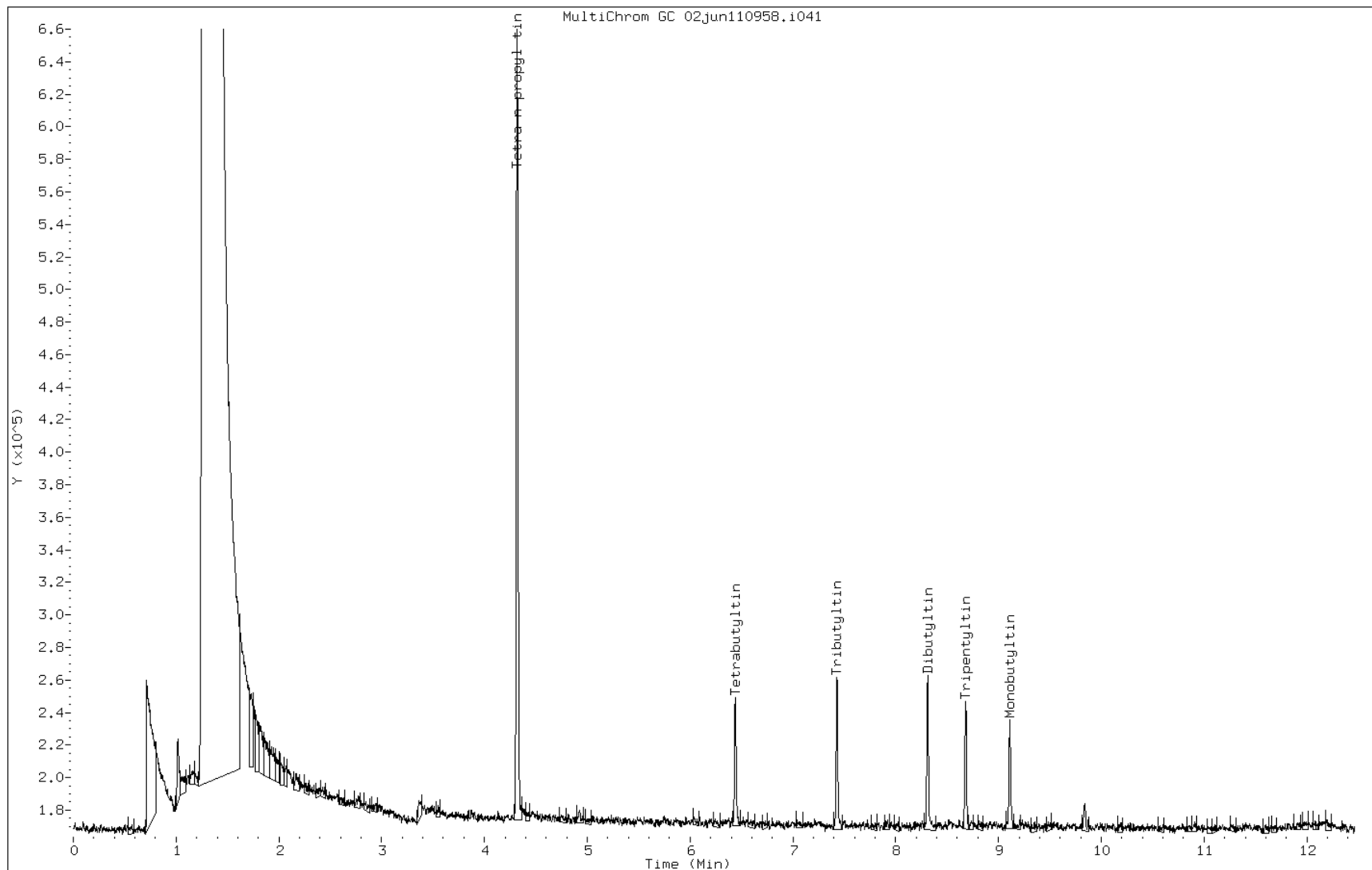
Cpnd Variable Local Compound Variable

AMOUNTS				
RT	EXP RT (REL RT)	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	
==	=====	=====	=====	
* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
4.318	4.300 (1.000)	591163 500.000		
2	Tetrabutyltin			CAS #: 1461-25-2
6.439	6.439 (1.491)	93547 100.000	104.8	
3	Tributyltin			CAS #: 688-73-3
7.428	7.430 (1.720)	111035 89.0000	96.43	
4	Dibutyltin			CAS #: 1002-53-5
8.310	8.310 (1.925)	120285 77.0000	88.05	
\$ 5	Triphenyltin			CAS #: 3342-67-4
8.680	8.683 (2.010)	91372 90.0000	92.51	

AMOUNTS			
		CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
6 Monobutyltin		CAS #: 2406-65-7	
9.111	9.111 (2.110)	87874 62.0000	61.80

Data File: 02jun110958-r041.d
Client ID: 100 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: IC-131788,1,100 PPB
Lab Sample ID: IC-131788

Date: 02-JUN-2011 12:59
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r051.d
Lab Smp Id: ICRT-131789 Client Smp ID: 250 PPB
Inj Date : 02-JUN-2011 13:16
Operator : WBR Inst ID: 2860_2.i
Smp Info : ICRT-131789,1,250 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:36 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:16 Cal File: 02jun110958-r051.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

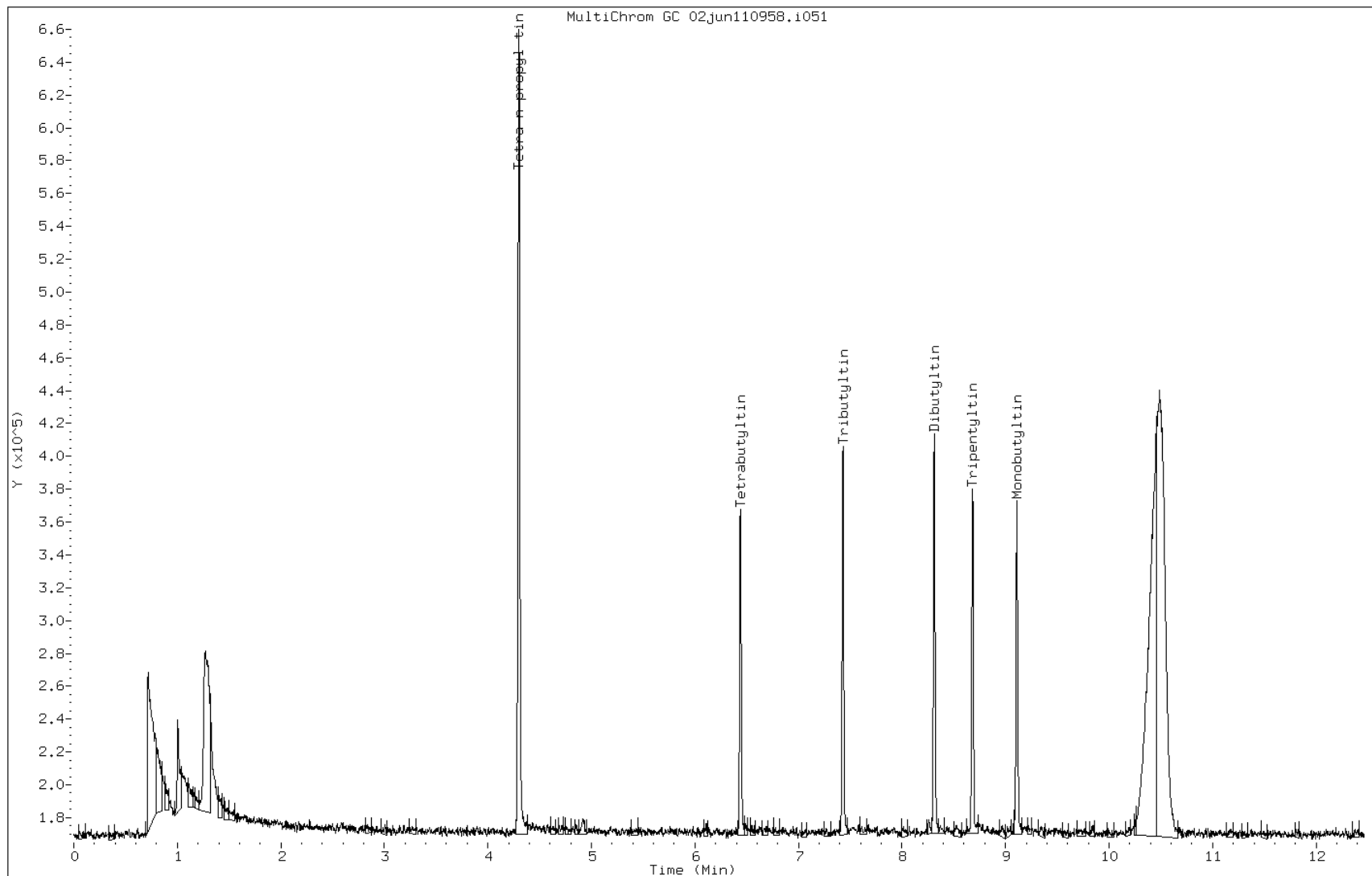
Cpnd Variable Local Compound Variable

AMOUNTS				
RT	EXP RT (REL RT)	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	
==	=====	=====	=====	
* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
4.300	4.300 (1.000)	654527	500.000	
2	Tetrabutyltin			CAS #: 1461-25-2
6.439	6.439 (1.497)	230088	250.000	232.7
3	Tributyltin			CAS #: 688-73-3
7.430	7.430 (1.728)	273273	223.000	214.4
4	Dibutyltin			CAS #: 1002-53-5
8.310	8.310 (1.932)	280302	193.000	185.3
\$ 5	Triphenyltin			CAS #: 3342-67-4
8.683	8.683 (2.019)	253291	225.000	231.6

AMOUNTS				
		CAL-AMT	ON-COL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
6 Monobutyltin				
		CAS #: 2406-65-7		
9.111	9.111 (2.119)	248166	155.000	157.6

Data File: 02jun110958-r051.d
Client ID: 250 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: ICRT-131789,1,250 PPB
Lab Sample ID: ICRT-131789

Date: 02-JUN-2011 13:16
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r061.d
Lab Smp Id: IC-131790 Client Smp ID: 500 PPB
Inj Date : 02-JUN-2011 13:33
Operator : WBR Inst ID: 2860_2.i
Smp Info : IC-131790,1,500 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:36 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:33 Cal File: 02jun110958-r061.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

AMOUNTS				
RT	EXP RT (REL RT)	CAL-AMT	ON-COL	
==	=====	RESPONSE (ug/L)	(ug/L)	
		=====	=====	
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
4.325	4.300 (1.000)	617884	500.000	

2 Tetrabutyltin				CAS #: 1461-25-2
6.446	6.439 (1.491)	422704	500.000	452.9

3 Tributyltin				CAS #: 688-73-3
7.435	7.430 (1.719)	494869	445.000	411.2

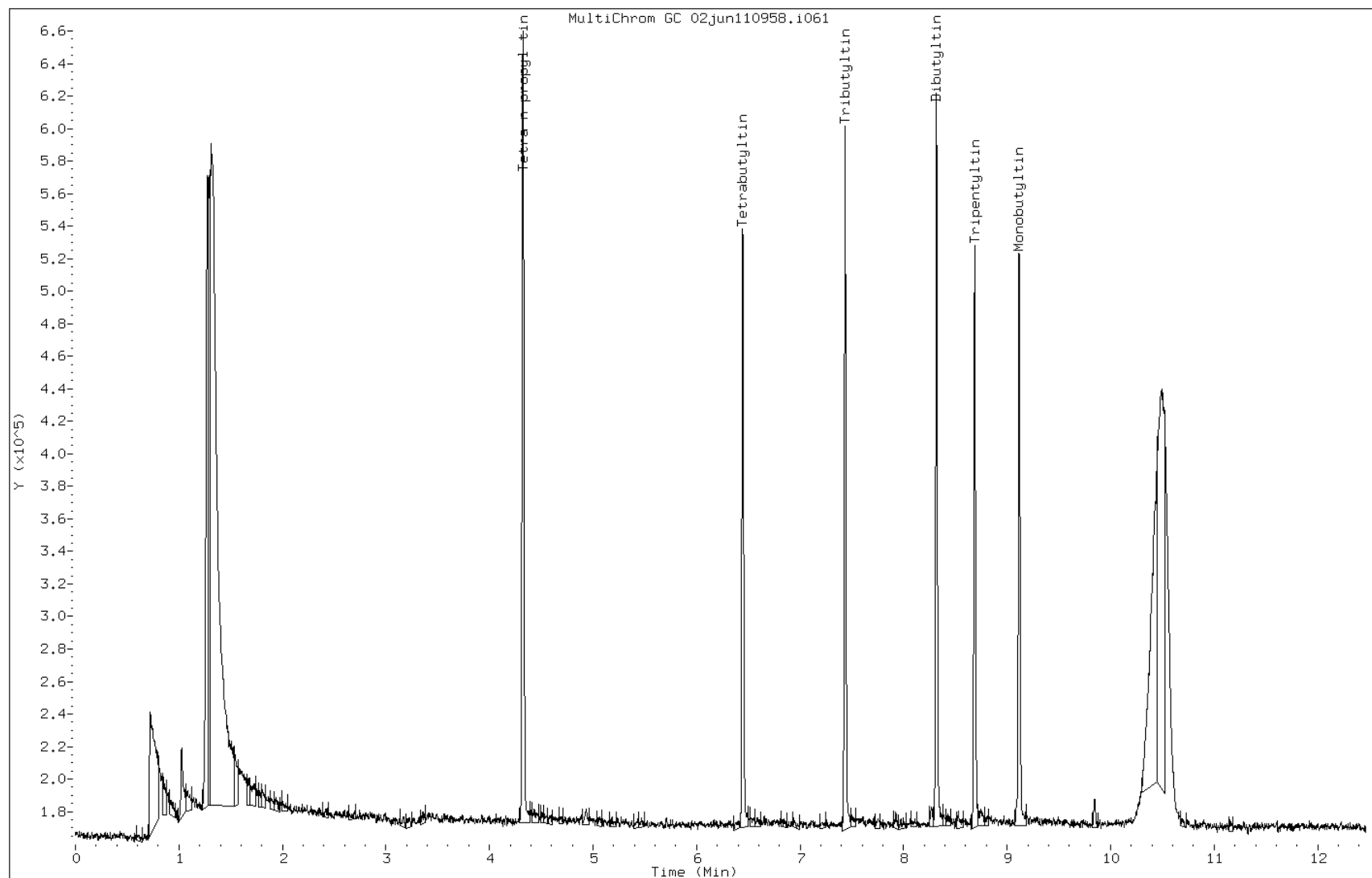
4 Dibutyltin				CAS #: 1002-53-5
8.317	8.310 (1.923)	521383	385.000	365.2

\$ 5 Triphenyltin				CAS #: 3342-67-4
8.687	8.683 (2.009)	423892	450.000	410.6

AMOUNTS			
		CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
6 Monobutyltin		CAS #: 2406-65-7	
9.115	9.111 (2.108)	439786 310.000	295.9

Data File: 02jun110958-r061.d
Client ID: 500 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: IC-131790,1,500 PPB
Lab Sample ID: IC-131790

Date: 02-JUN-2011 13:33
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r071.d
Lab Smp Id: IC-131791 Client Smp ID: 1000 PPB
Inj Date : 02-JUN-2011 13:50
Operator : WBR Inst ID: 2860_2.i
Smp Info : IC-131791,1,1000 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:36 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

AMOUNTS				
RT	EXP RT (REL RT)	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	
==	=====	=====	=====	
* 1	Tetra-n-propyl tin		CAS #: 2176-98-9	
4.325	4.300 (1.000)	635979 500.000		
2	Tetrabutyltin		CAS #: 1461-25-2	
6.450	6.439 (1.492)	849402 1000.00	884.1	
3	Tributyltin		CAS #: 688-73-3	
7.439	7.430 (1.720)	968495 890.000	781.8	
4	Dibutyltin		CAS #: 1002-53-5	
8.321	8.310 (1.924)	1012080 770.000	688.7	
\$ 5	Triphenyltin		CAS #: 3342-67-4	
8.689	8.683 (2.009)	874446 900.000	822.9	

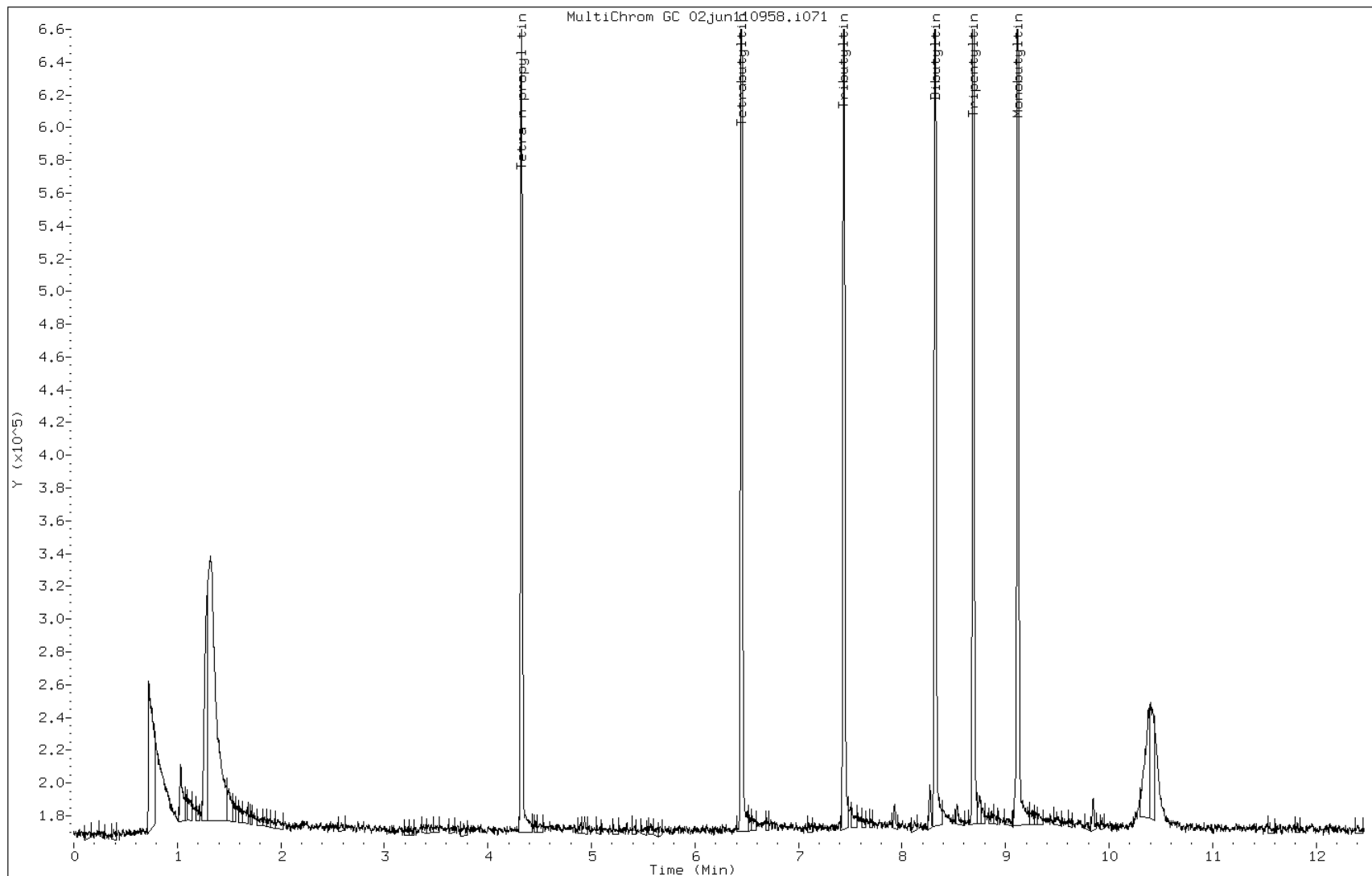
Data File: 02jun110958-r071.d
Report Date: 03-Jun-2011 13:36

Page 2

				AMOUNTS	
		CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)	
==	=====	=====	=====	=====	
6 Monobutyltin		CAS #: 2406-65-7			
9.117	9.111 (2.108)	938748	620.000	613.7	

Data File: 02jun110958-r071.d
Client ID: 1000 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: IC-131791,1,1000 PPB
Lab Sample ID: IC-131791

Date: 02-JUN-2011 13:50
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Lab Sample ID: ICV 200-19102/6 Calibration Date: 06/02/2011 14:24
Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42
GC Column: RTX-35 ID: 0.32 (mm) Calib End Date: 06/02/2011 13:50
Lab File ID: 02jun110958-r091.d Conc. Units: ug/L
EPA Sample No.: ICV

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrabutyltin	Ave	0.7015	0.7794		278	250	11.1	25.0
Tributyltin	Ave	0.9082	0.9785		240	222	7.7	25.0
Dibutyltin	Ave	1.119	1.172		202	192	4.8	25.0
Monobutyltin	Ave	0.998	1.138		177	155	14.0	25.0
Triphenyltin	Ave	0.6749	0.6989		233	225	3.6	25.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Lab Sample ID: ICV 200-19102/6 Calibration Date: 06/02/2011 14:24
Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42
GC Column: RTX-35 ID: 0.32 (mm) Calib End Date: 06/02/2011 13:50
Lab File ID: 02jun110958-r091.d

Analyte	RT	RT WINDOW	
		TO	FROM
Tetrabutyltin	5.28	5.23	5.33
Tributyltin	6.30	6.25	6.35
Dibutyltin	7.20	7.14	7.24
Monobutyltin	8.00	7.95	8.05
Triphenyltin	7.56	7.50	7.60

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r091.d
Lab Smp Id: ICV-131792 Client Smp ID: ICV
Inj Date : 02-JUN-2011 14:24
Operator : WBR Inst ID: 2860_1.i
Smp Info : ICV-131792,1,ICV
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICV.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

CONCENTRATIONS				
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	=====	=====	=====	=====

* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
3.021	3.017 (1.000)	648587	500.000	

2	Tetrabutyltin			CAS #: 1461-25-2
5.280	5.276 (1.748)	252744	277.763	277.8

3	Tributyltin			CAS #: 688-73-3
6.300	6.295 (2.085)	282404	239.706	239.7

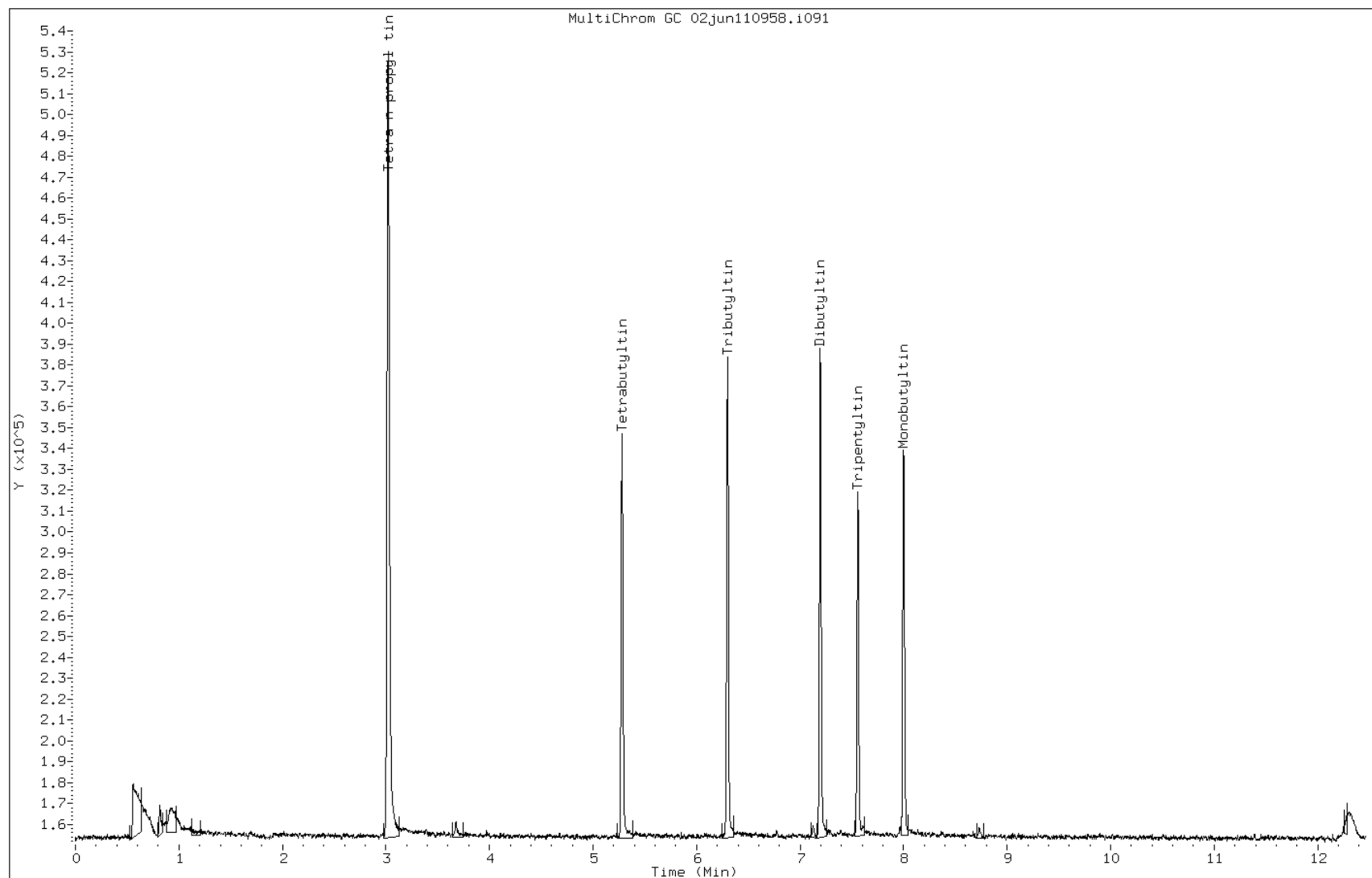
4	Dibutyltin			CAS #: 1002-53-5
7.195	7.191 (2.381)	292689	201.715	201.7

\$ 5	Triphenyltin			CAS #: 3342-67-4
7.557	7.554 (2.501)	203987	232.993	233.0

CONCENTRATIONS			
		ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
6 Monobutyltin		CAS #: 2406-65-7	
8.000	7.996 (2.648)	228740 176.668	176.7

Data File: 02jun110958-r091.d
Client ID: ICV
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: ICV-131792,1,ICV
Lab Sample ID: ICV-131792

Date: 02-JUN-2011 14:24
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Lab Sample ID: ICV 200-19102/6 Calibration Date: 06/02/2011 14:24
Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42
GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 06/02/2011 13:50
Lab File ID: 02jun110958-r091.d Conc. Units: ug/L
EPA Sample No.: ICV

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrabutyltin	Ave	0.7553	0.7306		242	250	-3.3	25.0
Tributyltin	Ave	0.9739	0.9279		212	222	-4.7	25.0
Dibutyltin	Ave	1.155	1.124		187	192	-2.7	25.0
Monobutyltin	Ave	1.203	1.200		155	155	-0.2	25.0
Triphenyltin	Ave	0.8354	0.8028		216	225	-3.9	25.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Lab Sample ID: ICV 200-19102/6 Calibration Date: 06/02/2011 14:24
Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42
GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 06/02/2011 13:50
Lab File ID: 02jun110958-r091.d

Analyte	RT	RT WINDOW	
		TO	FROM
Tetrabutyltin	6.44	6.39	6.49
Tributyltin	7.43	7.38	7.48
Dibutyltin	8.31	8.26	8.36
Monobutyltin	9.11	9.06	9.16
Triphenyltin	8.68	8.63	8.73

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r091.d
Lab Smp Id: ICV-131792 Client Smp ID: ICV
Inj Date : 02-JUN-2011 14:24
Operator : WBR Inst ID: 2860_2.i
Smp Info : ICV-131792,1,ICV
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:37 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICV.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

CONCENTRATIONS				
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
* 1 Tetra-n-propyl tin CAS #: 2176-98-9				
4.300	4.300 (1.000)	659343	500.000	

2 Tetrabutyltin CAS #: 1461-25-2				
6.442	6.439 (1.498)	240848	241.815	241.8

3 Tributyltin CAS #: 688-73-3				
7.430	7.430 (1.728)	272256	211.998	212.0

4 Dibutyltin CAS #: 1002-53-5				
8.312	8.310 (1.933)	285342	187.277	187.3

\$ 5 Triphenyltin CAS #: 3342-67-4				
8.683	8.683 (2.019)	238184	216.214	216.2

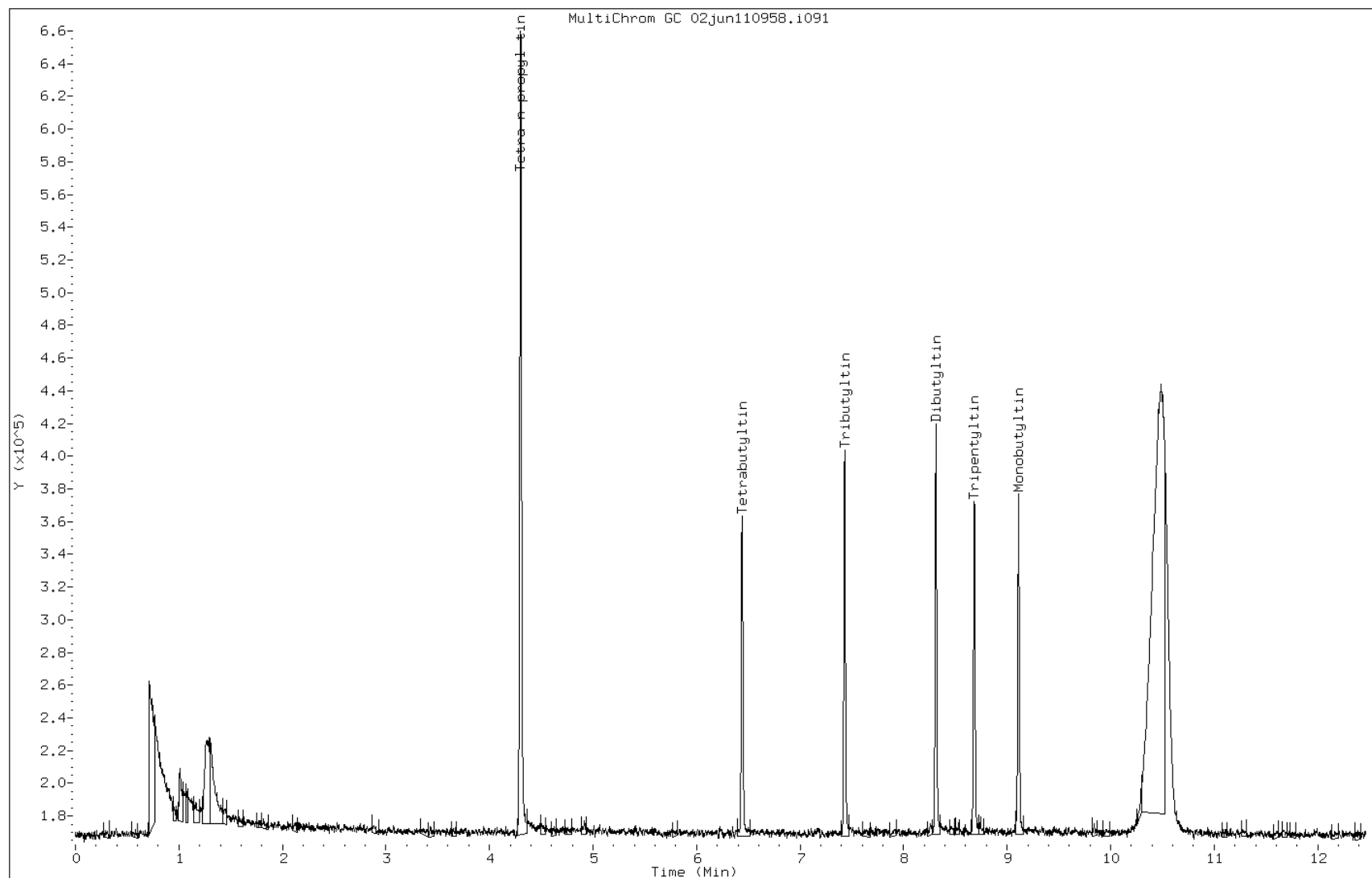
Data File: 02jun110958-r091.d
Report Date: 03-Jun-2011 13:37

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			CONCENTRATIONS	
RT	EXP RT (REL RT)		ON-COL	FINAL
==	=====		RESPONSE (ug/L)	(ug/L)
==	=====		=====	=====
6 Monobutyltin			CAS #: 2406-65-7	
9.111	9.111 (2.119)		245329 154.703	154.7

Data File: 02jun110958-r091.d
Client ID: ICV
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: ICV-131792,1,ICV
Lab Sample ID: ICV-131792

Date: 02-JUN-2011 14:24
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Lab Sample ID: CCV 200-19104/11 Calibration Date: 06/02/2011 17:30
Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42
GC Column: RTX-35 ID: 0.32 (mm) Calib End Date: 06/02/2011 13:50
Lab File ID: 02jun111106-r111.d Conc. Units: ug/L
EPA Sample No.: 250 PPB

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrabutyltin	Ave	0.7015	0.7748		276	250	10.5	25.0
Tributyltin	Ave	0.9082	0.9909		243	222	9.1	25.0
Dibutyltin	Ave	1.119	1.166		201	192	4.2	25.0
Monobutyltin	Ave	0.998	1.136		176	155	13.8	25.0
Tripentyltin	Ave	0.6749	0.7551		252	225	11.9	25.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Lab Sample ID: CCV 200-19104/11 Calibration Date: 06/02/2011 17:30
Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42
GC Column: RTX-35 ID: 0.32 (mm) Calib End Date: 06/02/2011 13:50
Lab File ID: 02jun111106-r111.d

Analyte	RT	RT WINDOW	
		TO	FROM
Tetrabutyltin	5.30	5.23	5.33
Tributyltin	6.32	6.25	6.35
Dibutyltin	7.21	7.14	7.24
Monobutyltin	8.02	7.95	8.05
Tripentyltin	7.57	7.50	7.60

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN111106.b/02jun111106-r111.d
Lab Smp Id: CCV-131789 Client Smp ID: 250 PPB
Inj Date : 02-JUN-2011 17:30
Operator : WBR Inst ID: 2860_1.i
Smp Info : CCV-131789,1,250 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:50 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

AMOUNTS				
RT	EXP RT (REL RT)	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	
==	=====	=====	=====	
* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
3.039	3.017 (1.000)	665100	500.000	
2	Tetrabutyltin			CAS #: 1461-25-2
5.298	5.276 (1.743)	257673	250.000	276.1
3	Tributyltin			CAS #: 688-73-3
6.315	6.295 (2.078)	293277	223.000	242.8
4	Dibutyltin			CAS #: 1002-53-5
7.211	7.191 (2.373)	298532	193.000	200.6
\$ 5	Triphenyltin			CAS #: 3342-67-4
7.572	7.554 (2.492)	225986	225.000	251.7

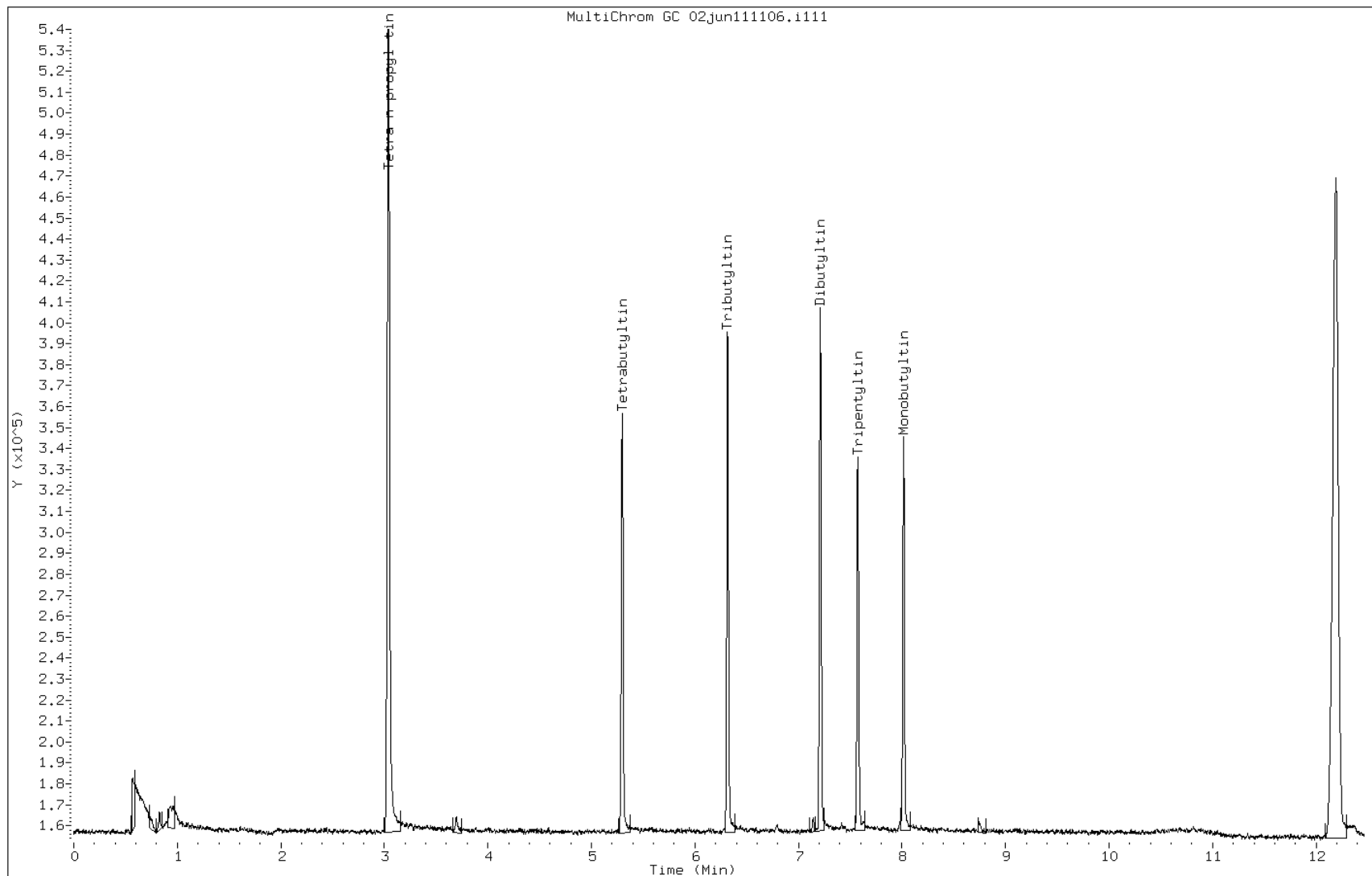
Data File: 02jun111106-r111.d
Report Date: 03-Jun-2011 12:50

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				AMOUNTS	
		CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)	
==	=====	=====	=====	=====	
6 Monobutyltin		CAS #: 2406-65-7			
8.015	7.996 (2.637)	234242	155.000	176.4	

Data File: 02jun111106-r111.d
Client ID: 250 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: CCV-131789,1,250 PPB
Lab Sample ID: CCV-131789

Date: 02-JUN-2011 17:30
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Lab Sample ID: CCV 200-19104/11 Calibration Date: 06/02/2011 17:30
Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42
GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 06/02/2011 13:50
Lab File ID: 02jun111106-r111.d Conc. Units: ug/L
EPA Sample No.: 250 PPB

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrabutyltin	Ave	0.7553	0.7270		241	250	-3.7	25.0
Tributyltin	Ave	0.9739	0.9700		222	222	-0.4	25.0
Dibutyltin	Ave	1.155	1.191		198	192	3.1	25.0
Monobutyltin	Ave	1.203	1.247		161	155	3.7	25.0
Triphenyltin	Ave	0.8354	0.8852		238	225	6.0	25.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Lab Sample ID: CCV 200-19104/11 Calibration Date: 06/02/2011 17:30
Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42
GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 06/02/2011 13:50
Lab File ID: 02jun111106-r111.d

Analyte	RT	RT WINDOW	
		TO	FROM
Tetrabutyltin	6.45	6.39	6.49
Tributyltin	7.45	7.38	7.48
Dibutyltin	8.33	8.26	8.36
Monobutyltin	9.12	9.06	9.16
Triphenyltin	8.70	8.63	8.73

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN111106.b/02jun111106-r111.d
Lab Smp Id: CCV-131789 Client Smp ID: 250 PPB
Inj Date : 02-JUN-2011 17:30
Operator : WBR Inst ID: 2860_2.i
Smp Info : CCV-131789,1,250 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

AMOUNTS				
RT	EXP RT (REL RT)	CAL - AMT		ON - COL
		RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
* 1 Tetra-n-propyl tin CAS #: 2176-98-9				
4.316	4.300 (1.000)	631832	500.000	

2 Tetrabutyltin CAS #: 1461-25-2				
6.455	6.439 (1.496)	229666	250.000	240.6

3 Tributyltin CAS #: 688-73-3				
7.446	7.430 (1.725)	272716	223.000	221.6

4 Dibutyltin CAS #: 1002-53-5				
8.326	8.310 (1.929)	289753	193.000	198.5

\$ 5 Triphenyltin CAS #: 3342-67-4				
8.696	8.683 (2.015)	251691	225.000	238.4

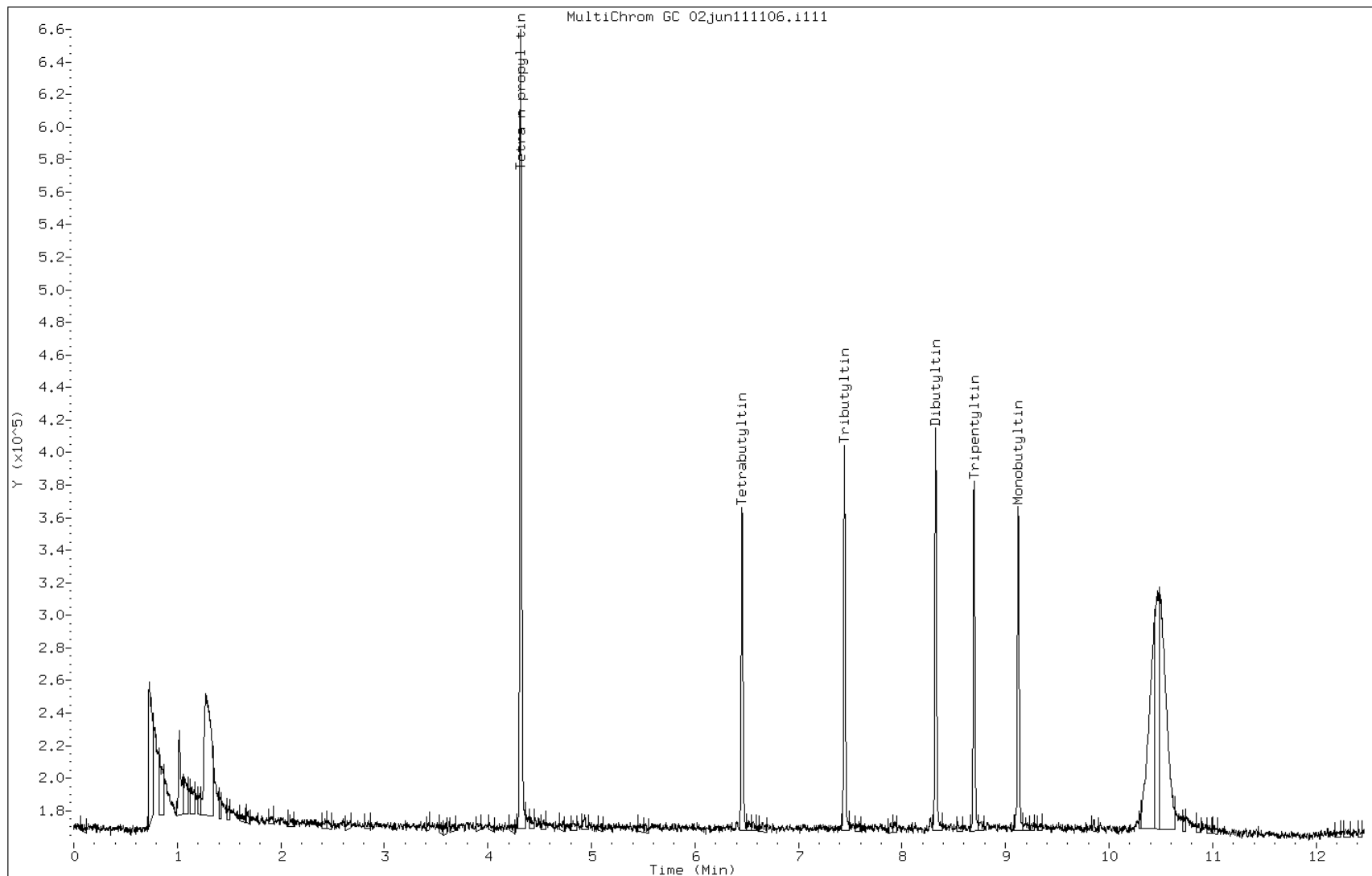
Data File: 02jun111106-r111.d
Report Date: 03-Jun-2011 13:40

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			AMOUNTS	
RT	EXP RT (REL RT)		CAL-AMT	ON-COL
==	=====		RESPONSE (ug/L)	(ug/L)
==	=====		=====	=====
6 Monobutyltin			CAS #: 2406-65-7	
9.124	9.111 (2.114)		244161 155.000	160.7

Data File: 02jun111106-r111.d
Client ID: 250 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: CCV-131789,1,250 PPB
Lab Sample ID: CCV-131789

Date: 02-JUN-2011 17:30
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: _____ Lab Sample ID: MB 200-18670/1-A
Matrix: Water Lab File ID: 02jun111106-r081.d
Analysis Method: Organotins/GC Date Collected: _____
Extraction Method: 3510C Date Extracted: 05/26/2011 20:40
Sample wt/vol: 1000 (mL) Date Analyzed: 06/02/2011 16:40
Con. Extract Vol.: 1000 (uL) Dilution Factor: 1
Injection Volume: 1.5 (uL) GC Column: RTX-35 ID: 0.32 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	0.050	U	0.050	0.012
688-73-3	Tributyltin	0.045	U	0.045	0.012
1002-53-5	Dibutyltin	0.039	U	0.039	0.0084
2406-65-7	Monobutyltin	0.50	U J	0.50	0.50

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	101		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN111106.b/02jun111106-r081.d
Lab Smp Id: MB 200-18670/1-A Client Smp ID: MB 200-18670/1-A
Inj Date : 02-JUN-2011 16:40
Operator : WBR Inst ID: 2860_1.i
Smp Info : MB 200-18670/1-A
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		CONCENTRATIONS		
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		
==	=====	=====	=====	=====
* 1	Tetra-n-propyl tin	CAS #: 2176-98-9		
3.068	3.017 (0.000)	715605	500.000	(M)

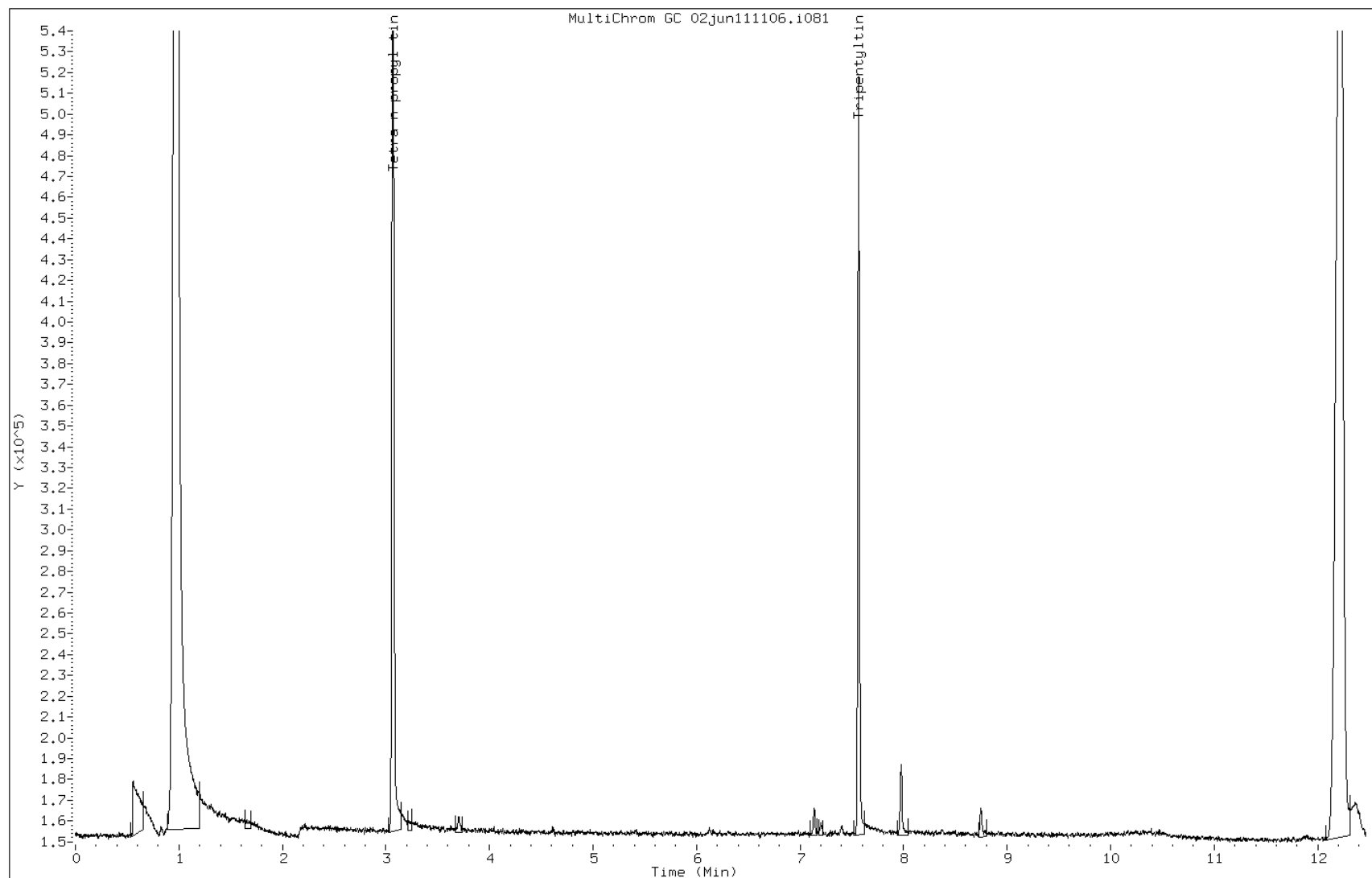
\$ 5	Triphenyltin	CAS #: 3342-67-4		
7.565	7.554 (1.000)	438129	453.563	453.6

QC Flag Legend

M - Compound response manually integrated.

Data File: 02jun111106-r081.d
Client ID: MB 200-18670/1-A
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: MB 200-18670/1-A
Lab Sample ID: MB 200-18670/1-A

Date: 02-JUN-2011 16:40
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: _____ Lab Sample ID: MB 200-18670/1-A
Matrix: Water Lab File ID: 02jun111106-r081.d
Analysis Method: Organotins/GC Date Collected: _____
Extraction Method: 3510C Date Extracted: 05/26/2011 20:40
Sample wt/vol: 1000 (mL) Date Analyzed: 06/02/2011 16:40
Con. Extract Vol.: 1000 (uL) Dilution Factor: 1
Injection Volume: 1.5 (uL) GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	97		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN111106.b/02jun111106-r081.d
Lab Smp Id: MB 200-18670/1-A Client Smp ID: MB 200-18670/1-A
Inj Date : 02-JUN-2011 16:40
Operator : WBR Inst ID: 2860_2.i
Smp Info : MB 200-18670/1-A
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

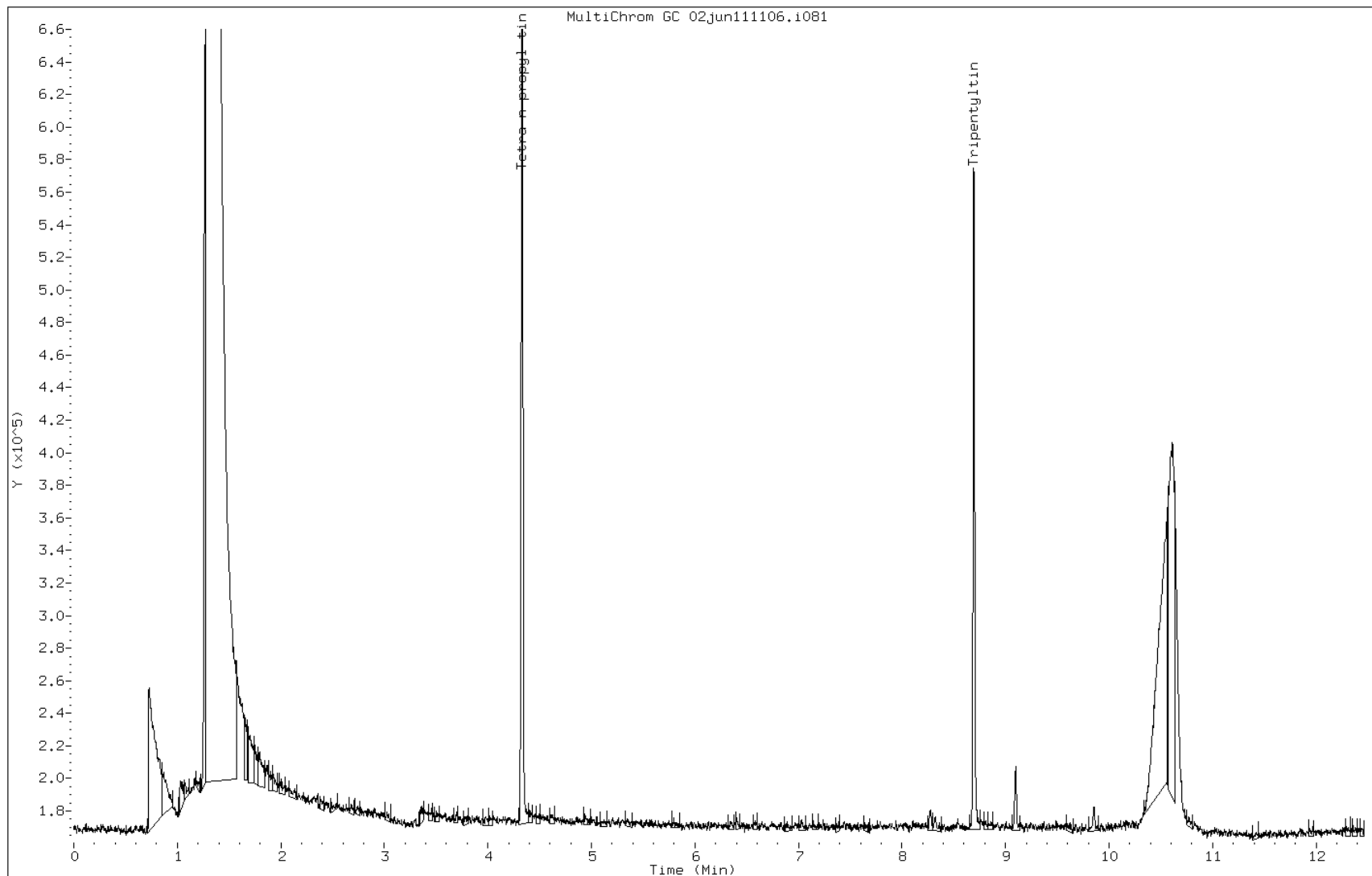
Cpnd Variable Local Compound Variable

			CONCENTRATIONS	
RT	EXP RT (REL RT)		ON-COL	FINAL
==	=====		RESPONSE (ug/L)	(ug/L)
==	=====		=====	=====
* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
4.329	4.300 (1.000)		646455	500.000

\$ 5	Triphenyltin			CAS #: 3342-67-4
8.694	8.683 (2.008)		472209	437.197 437.2

Data File: 02jun111106-r081.d
Client ID: MB 200-18670/1-A
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: MB 200-18670/1-A
Lab Sample ID: MB 200-18670/1-A

Date: 02-JUN-2011 16:40
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: _____ Lab Sample ID: MB 200-18879/1-A
Matrix: Solid Lab File ID: 02jun111106-r011.d
Analysis Method: Organotins/GC Date Collected: _____
Extraction Method: 3550B Date Extracted: 06/01/2011 17:38
Sample wt/vol: 30.00(g) Date Analyzed: 06/02/2011 14:41
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 1.5(uL) GC Column: RTX-35 ID: 0.32(mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	1.7	U	1.7	0.44
688-73-3	Tributyltin	1.5	U	1.5	0.67
1002-53-5	Dibutyltin	1.3	U	1.3	0.40
2406-65-7	Monobutyltin	5.0	U J	5.0	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	102		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN111106.b/02jun111106-r011.d
Lab Smp Id: MB 200-18879/1-A Client Smp ID: MB 200-18879/1-A
Inj Date : 02-JUN-2011 14:41
Operator : WBR Inst ID: 2860_1.i
Smp Info : MB 200-18879/1-A
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

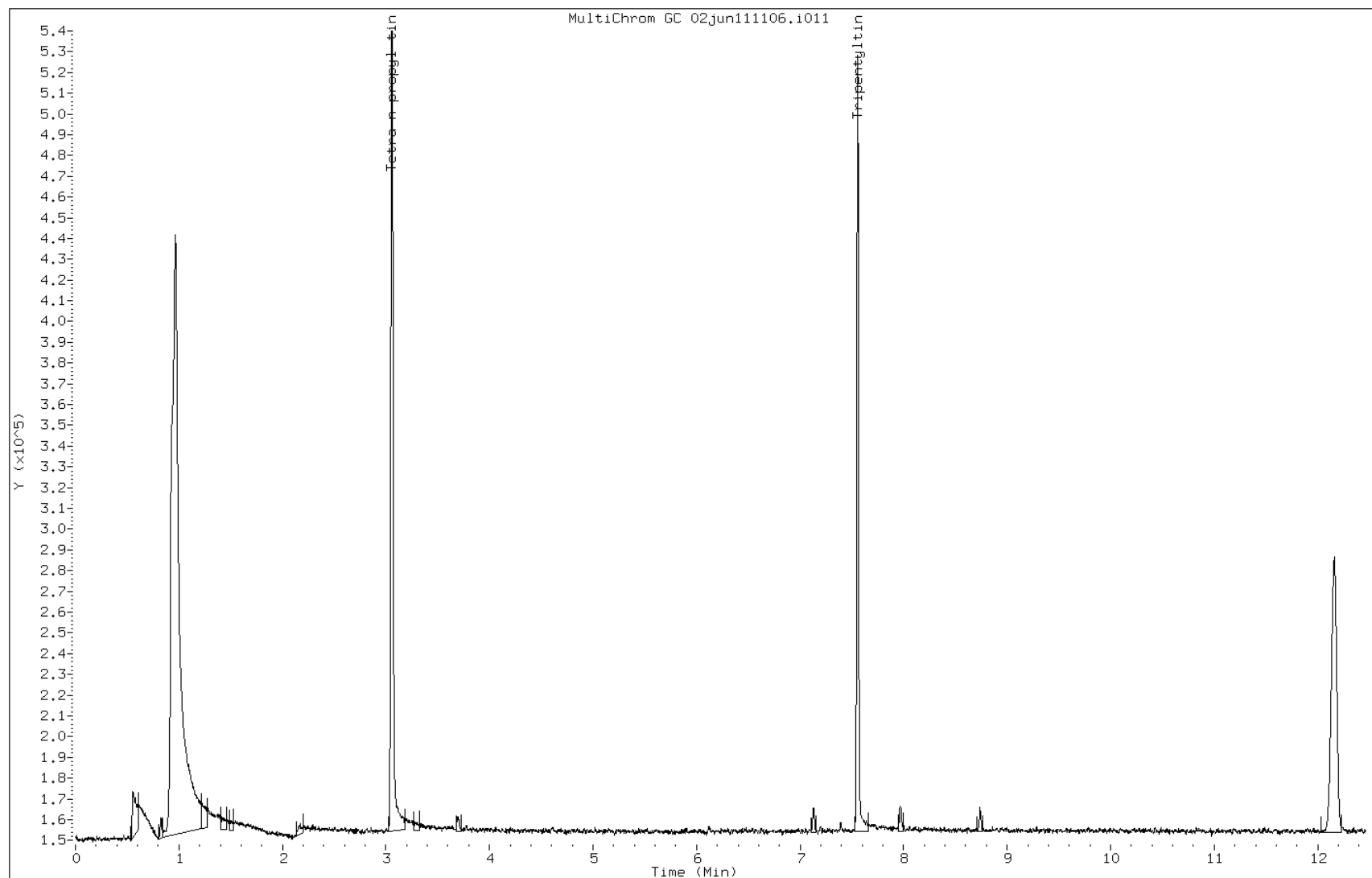
Cpnd Variable Local Compound Variable

			CONCENTRATIONS	
RT	EXP RT (REL RT)		ON-COL	FINAL
==	=====	RESPONSE (ug/L)	=====	=====
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
3.057	3.017 (1.000)	739634	500.000	

\$ 5 Triphenyltin				CAS #: 3342-67-4
7.557	7.554 (2.472)	458751	459.482	459.5

Data File: 02jun111106-r011.d
Client ID: MB 200-18879/1-A
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: MB 200-18879/1-A
Lab Sample ID: MB 200-18879/1-A

Date: 02-JUN-2011 14:41
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: _____ Lab Sample ID: MB 200-18879/1-A
Matrix: Solid Lab File ID: 02jun111106-r011.d
Analysis Method: Organotins/GC Date Collected: _____
Extraction Method: 3550B Date Extracted: 06/01/2011 17:38
Sample wt/vol: 30.00(g) Date Analyzed: 06/02/2011 14:41
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 1.5(uL) GC Column: RTX-5 ID: 0.32(mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	99		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN111106.b/02jun111106-r011.d
Lab Smp Id: MB 200-18879/1-A Client Smp ID: MB 200-18879/1-A
Inj Date : 02-JUN-2011 14:41
Operator : WBR Inst ID: 2860_2.i
Smp Info : MB 200-18879/1-A
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

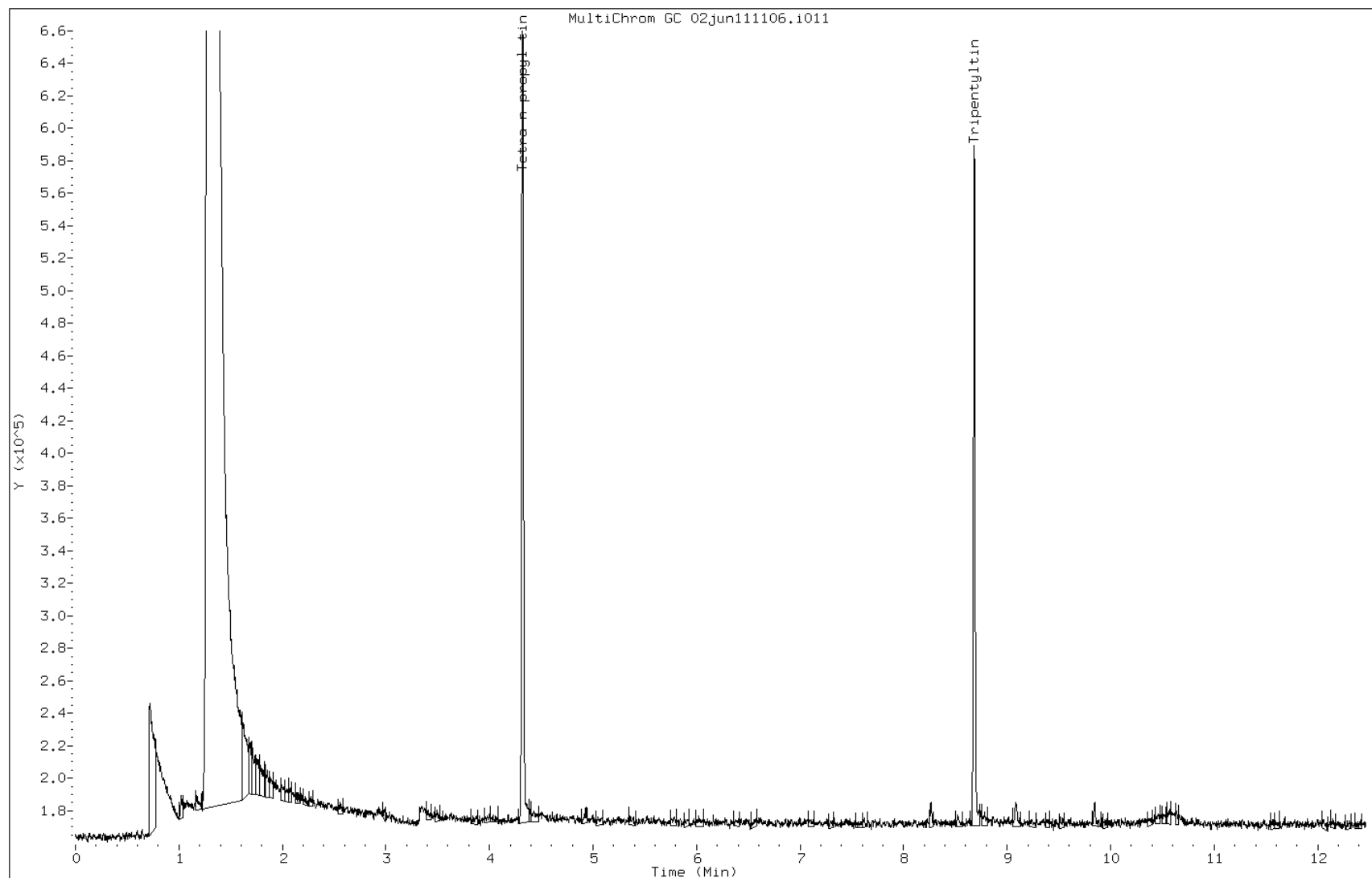
Cpnd Variable Local Compound Variable

			CONCENTRATIONS	
			ON-COL	FINAL
RT	EXP RT (REL RT)		RESPONSE (ug/L)	(ug/L)
==	=====		=====	=====
* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
4.318	4.300 (1.000)		659962	500.000

\$ 5	Tripentyltin			CAS #: 3342-67-4
8.683	8.683 (2.011)		488762	443.262 443.3

Data File: 02jun111106-r011.d
Client ID: MB 200-18879/1-A
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: MB 200-18879/1-A
Lab Sample ID: MB 200-18879/1-A

Date: 02-JUN-2011 14:41
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: _____ Lab Sample ID: LCS 200-18670/2-A
Matrix: Water Lab File ID: 02jun111106-r091.d
Analysis Method: Organotins/GC Date Collected: _____
Extraction Method: 3510C Date Extracted: 05/26/2011 20:40
Sample wt/vol: 1000 (mL) Date Analyzed: 06/02/2011 16:56
Con. Extract Vol.: 1000 (uL) Dilution Factor: 1
Injection Volume: 1.5 (uL) GC Column: RTX-35 ID: 0.32 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1002-53-5	Dibutyltin	0.295		0.039	0.0084
2406-65-7	Monobutyltin	0.50	U J	0.50	0.50

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	83		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN111106.b/02jun111106-r091.d
Lab Smp Id: LCS 200-18670/2-A Client Smp ID: LCS 200-18670/2-A
Inj Date : 02-JUN-2011 16:56
Operator : WBR Inst ID: 2860_1.i
Smp Info : LCS 200-18670/2-A
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

CONCENTRATIONS				
RT	EXP RT (REL RT)	ON-COL	FINAL	
==	=====	RESPONSE (ug/L)	(ug/L)	
* 1	Tetra-n-propyl tin		CAS #: 2176-98-9	
3.086	3.017 (0.000)	909190 500.000		(M)
2	Tetrabutyltin		CAS #: 1461-25-2	
5.302	5.276 (1.000)	505654 396.425	396.4	
3	Tributyltin		CAS #: 688-73-3	
6.315	6.295 (1.000)	577712 349.810	349.8	
4	Dibutyltin		CAS #: 1002-53-5	
7.211	7.191 (1.000)	600588 295.272	295.3	
\$ 5	Triphenyltin		CAS #: 3342-67-4	
7.572	7.554 (1.000)	458045 373.218	373.2	

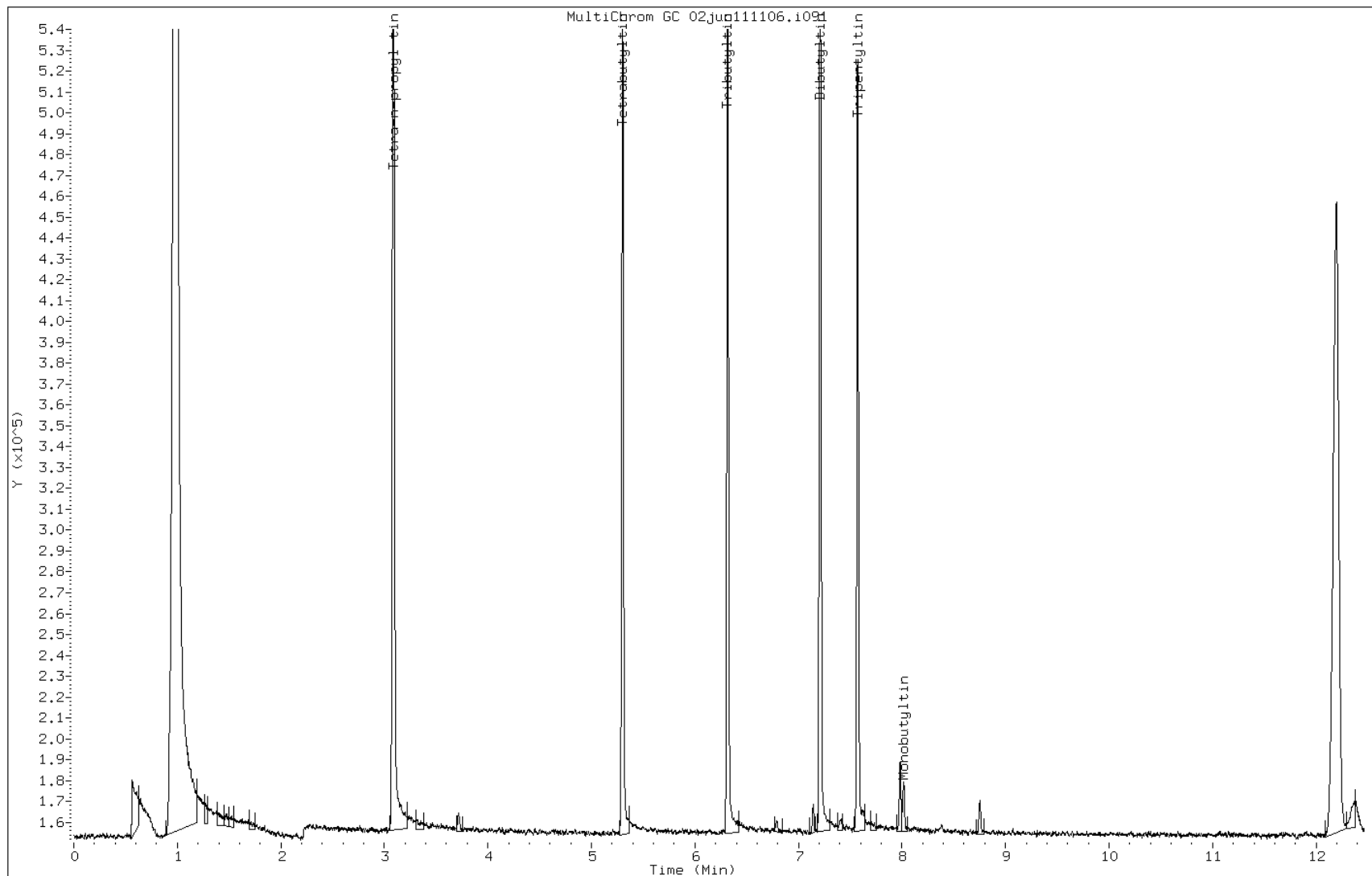
CONCENTRATIONS				
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
6 Monobutyltin				
		CAS #: 2406-65-7		
8.015	7.996 (1.000)	32458	17.8834	17.88 (aRM)

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.
- M - Compound response manually integrated.

Data File: 02jun111106-r091.d
Client ID: LCS 200-18670/2-A
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: LCS 200-18670/2-A
Lab Sample ID: LCS 200-18670/2-A

Date: 02-JUN-2011 16:56
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



Manual Integration Report

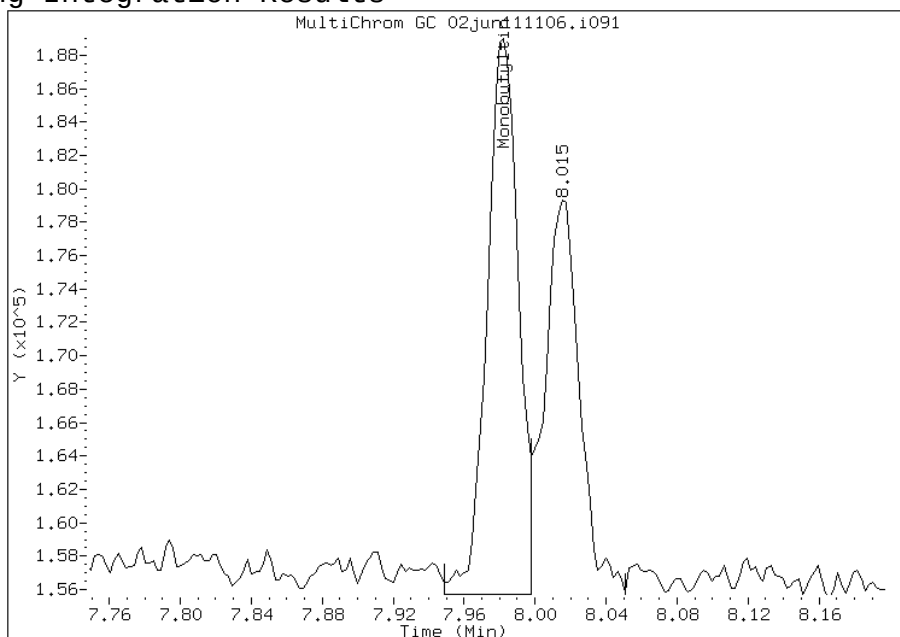
Data File: 02jun111106-r091.d
Lab Sample ID: LCS 200-18670/2-A
Inj. Date and Time: 02-JUN-2011 16:56
Instrument ID: 2860_1.i
Client ID: LCS 200-18670/2-A
Compound: 6 Monobutyltin
CAS #: 2406-65-7
Report Date: 06/06/2011

RT: 7.98 Processing Integration Results

Response: 40702

Amount: 0.000000

Conc: 0.000000



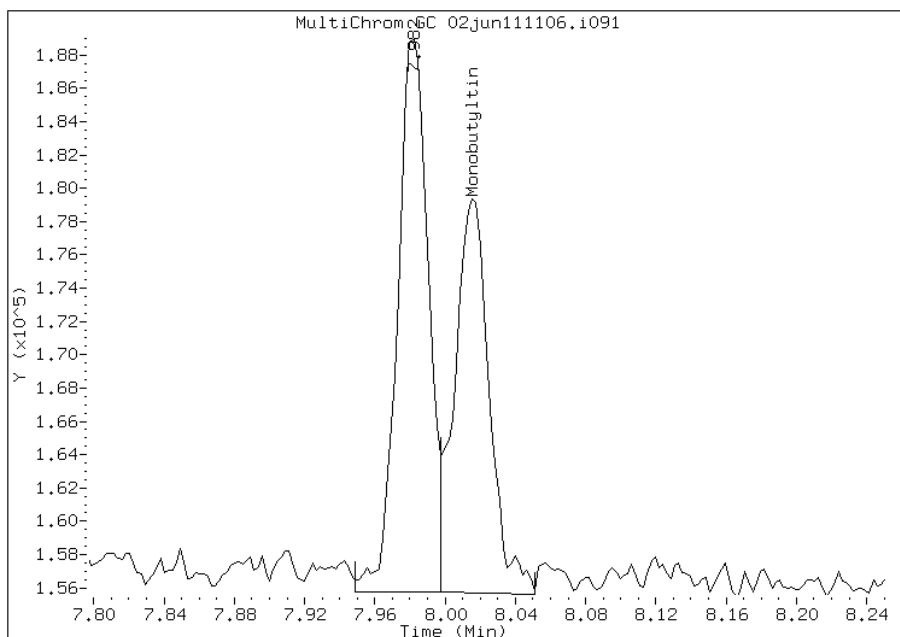
Manual Integration Results

RT: 8.02

Response: 32458

Amount: 17.88

Conc: 17.88



File Uploaded By: wbr

Manual Integration Reason: Analyte misidentified by the data system

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: _____ Lab Sample ID: LCS 200-18670/2-A
Matrix: Water Lab File ID: 02jun111106-r091.d
Analysis Method: Organotins/GC Date Collected: _____
Extraction Method: 3510C Date Extracted: 05/26/2011 20:40
Sample wt/vol: 1000 (mL) Date Analyzed: 06/02/2011 16:56
Con. Extract Vol.: 1000 (uL) Dilution Factor: 1
Injection Volume: 1.5 (uL) GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	0.389		0.050	0.012
688-73-3	Tributyltin	0.337		0.045	0.012

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	86		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN111106.b/02jun111106-r091.d
Lab Smp Id: LCS 200-18670/2-A Client Smp ID: LCS 200-18670/2-A
Inj Date : 02-JUN-2011 16:56
Operator : WBR Inst ID: 2860_2.i
Smp Info : LCS 200-18670/2-A
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

CONCENTRATIONS				
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	=====	=====	=====	=====

* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
4.338	4.300 (1.000)	811973	500.000	

2	Tetrabutyltin			CAS #: 1461-25-2
6.455	6.439 (1.488)	477237	389.085	389.1

3	Tributyltin			CAS #: 688-73-3
7.444	7.430 (1.716)	532457	336.673	336.7

4	Dibutyltin			CAS #: 1002-53-5
8.324	8.310 (1.919)	567778	302.598	302.6

\$ 5	Triphenyltin			CAS #: 3342-67-4
8.694	8.683 (2.004)	527940	389.157	389.2

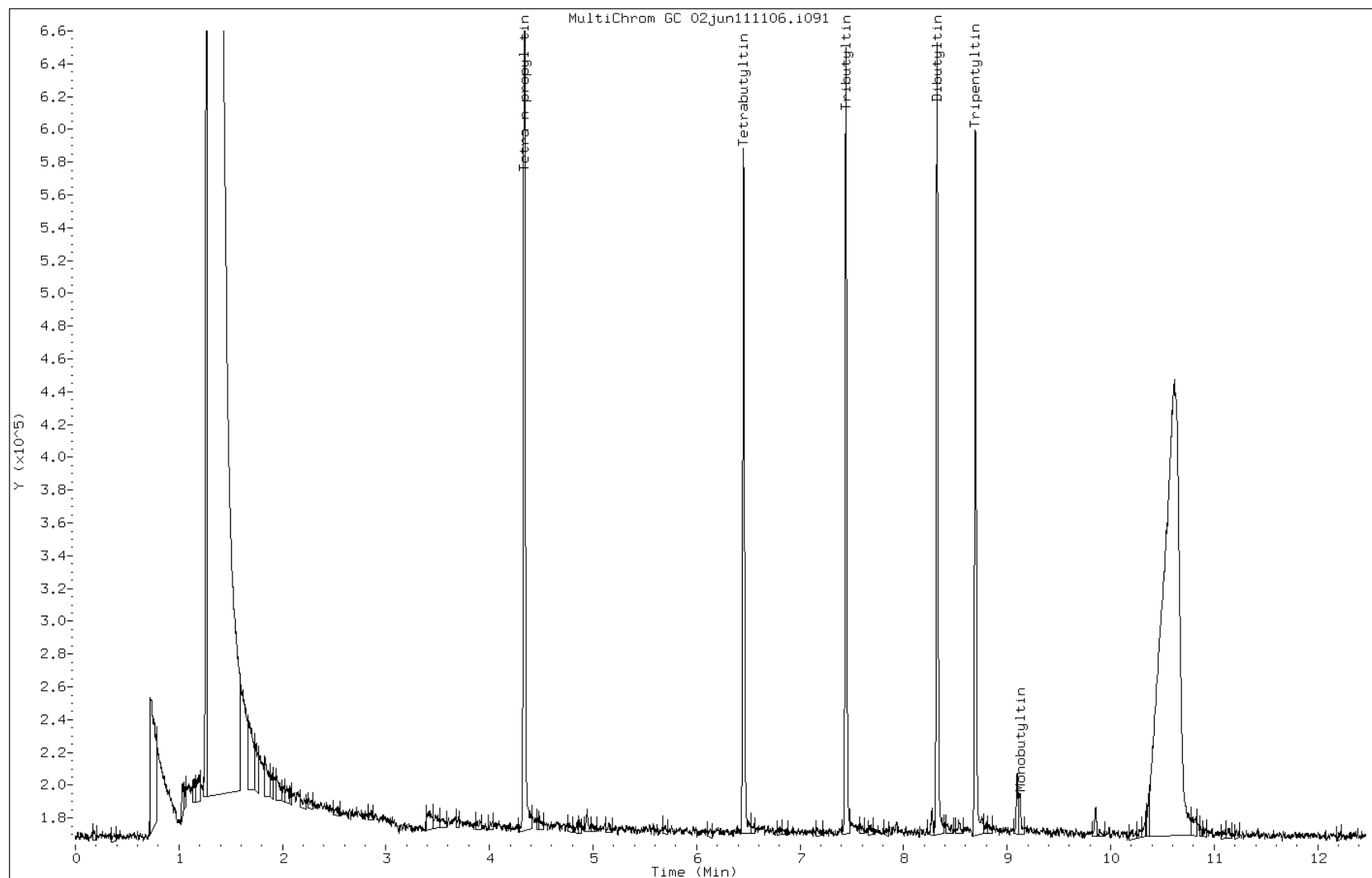
CONCENTRATIONS				
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
6 Monobutyltin				
		CAS #: 2406-65-7		
9.126	9.111 (2.104)	39106 20.0246	20.02	(aR)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

Data File: 02jun111106-r091.d
Client ID: LCS 200-18670/2-A
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: LCS 200-18670/2-A
Lab Sample ID: LCS 200-18670/2-A

Date: 02-JUN-2011 16:56
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: _____ Lab Sample ID: LCS 200-18879/2-A
Matrix: Solid Lab File ID: 02jun111106-r021.d
Analysis Method: Organotins/GC Date Collected: _____
Extraction Method: 3550B Date Extracted: 06/01/2011 17:38
Sample wt/vol: 30.00(g) Date Analyzed: 06/02/2011 14:58
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 1.5(uL) GC Column: RTX-35 ID: 0.32(mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1002-53-5	Dibutyltin	10.7		1.3	0.40
2406-65-7	Monobutyltin	5.0	U J	5.0	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	97		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN111106.b/02jun111106-r021.d
Lab Smp Id: LCS 200-18879/2-A Client Smp ID: LCS 200-18879/2-A
Inj Date : 02-JUN-2011 14:58
Operator : WBR Inst ID: 2860_1.i
Smp Info : LCS 200-18879/2-A
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

CONCENTRATIONS				
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	=====	=====	=====	=====

* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
3.063	3.017 (1.000)	728797	500.000	

2	Tetrabutyltin			CAS #: 1461-25-2
5.291	5.276 (1.727)	469061	458.759	458.8

3	Tributyltin			CAS #: 688-73-3
6.309	6.295 (2.059)	539298	407.379	407.4

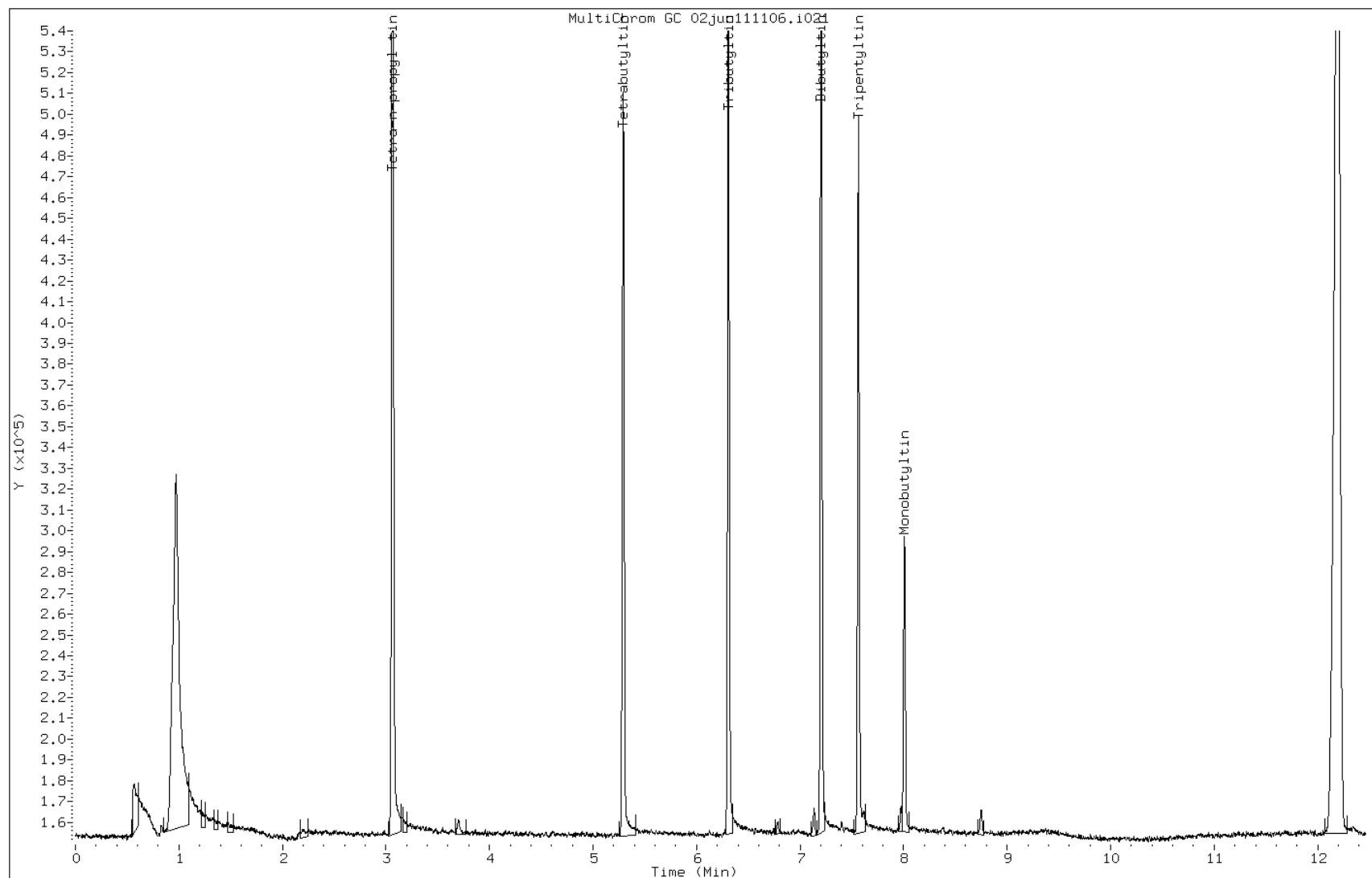
4	Dibutyltin			CAS #: 1002-53-5
7.202	7.191 (2.351)	522490	320.459	320.5

\$ 5	Triphenyltin			CAS #: 3342-67-4
7.563	7.554 (2.469)	430975	438.081	438.1

CONCENTRATIONS			
		ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
6 Monobutyltin		CAS #: 2406-65-7	
8.009	7.996 (2.614)	177270 121.846	121.8

Data File: 02jun111106-r021.d
Client ID: LCS 200-18879/2-A
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: LCS 200-18879/2-A
Lab Sample ID: LCS 200-18879/2-A

Date: 02-JUN-2011 14:58
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: _____ Lab Sample ID: LCS 200-18879/2-A
Matrix: Solid Lab File ID: 02jun111106-r021.d
Analysis Method: Organotins/GC Date Collected: _____
Extraction Method: 3550B Date Extracted: 06/01/2011 17:38
Sample wt/vol: 30.00(g) Date Analyzed: 06/02/2011 14:58
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 1.5(uL) GC Column: RTX-5 ID: 0.32(mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	13.8		1.7	0.44
688-73-3	Tributyltin	13.4		1.5	0.67

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	96		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN111106.b/02jun111106-r021.d
Lab Smp Id: LCS 200-18879/2-A Client Smp ID: LCS 200-18879/2-A
Inj Date : 02-JUN-2011 14:58
Operator : WBR Inst ID: 2860_2.i
Smp Info : LCS 200-18879/2-A
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

CONCENTRATIONS				
RT	EXP RT (REL RT)	ON-COL		FINAL
		RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
4.327	4.300 (1.000)	665016	500.000	

2 Tetrabutyltin				CAS #: 1461-25-2
6.453	6.439 (1.491)	416932	415.035	415.0

3 Tributyltin				CAS #: 688-73-3
7.441	7.430 (1.720)	522555	403.427	403.4

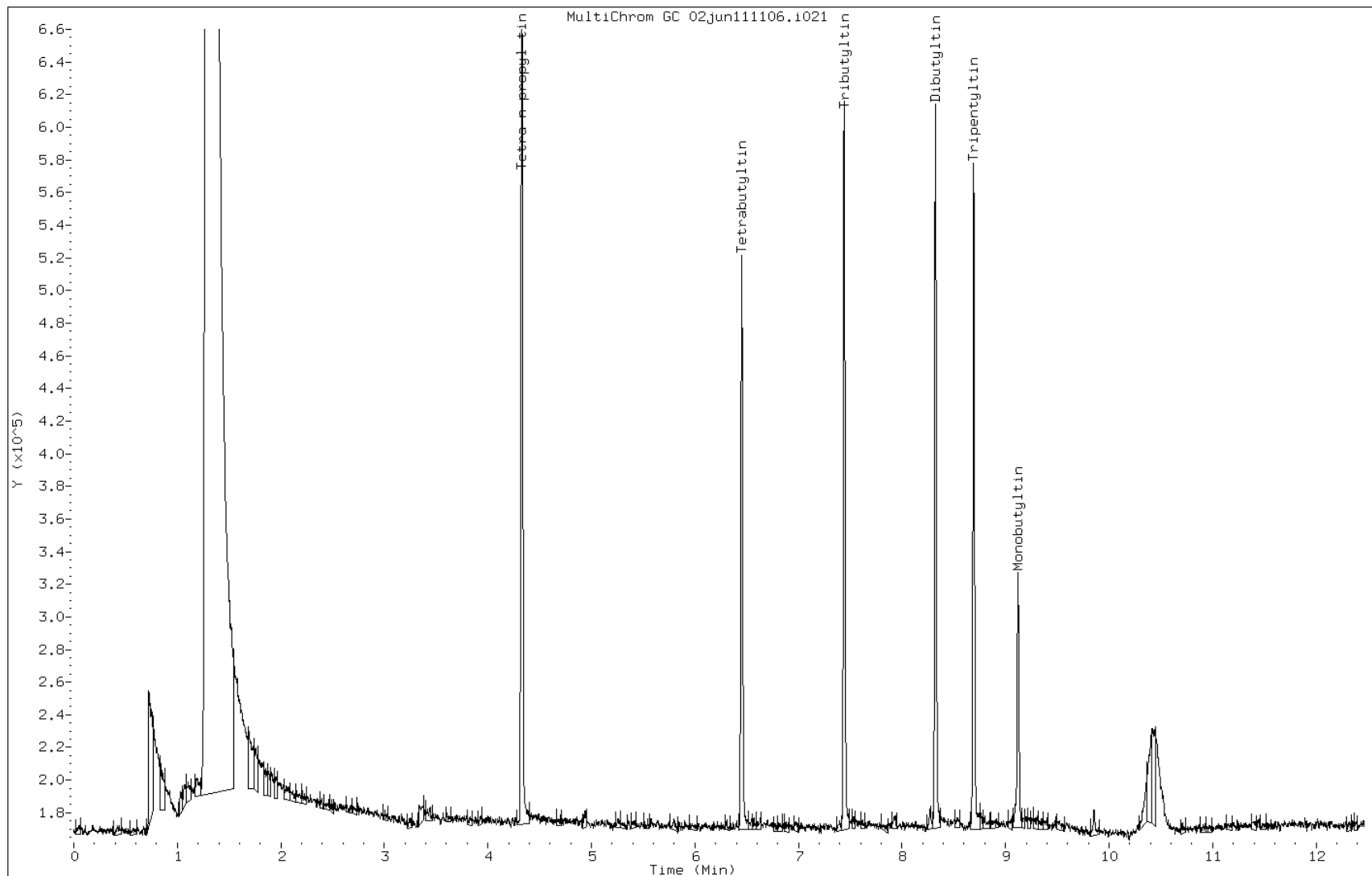
4 Dibutyltin				CAS #: 1002-53-5
8.324	8.310 (1.924)	501234	326.165	326.2

\$ 5 Triphenyltin				CAS #: 3342-67-4
8.694	8.683 (2.009)	481303	433.180	433.2

CONCENTRATIONS			
		ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
6 Monobutyltin		CAS #: 2406-65-7	
9.122	9.111 (2.108)	204093 127.602	127.6

Data File: 02jun111106-r021.d
Client ID: LCS 200-18879/2-A
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: LCS 200-18879/2-A
Lab Sample ID: LCS 200-18879/2-A

Date: 02-JUN-2011 14:58
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: SED-035-SIV-SDMS MS Lab Sample ID: 200-5311-1 MS
Matrix: Solid Lab File ID: 02jun111106-r061.d
Analysis Method: Organotins/GC Date Collected: 05/23/2011 15:00
Extraction Method: 3550B Date Extracted: 06/01/2011 17:38
Sample wt/vol: 30.92(g) Date Analyzed: 06/02/2011 16:06
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 1.5(uL) GC Column: RTX-35 ID: 0.32(mm)
% Moisture: 48.1 GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
688-73-3	Tributyltin	26.5		2.8	1.3
1002-53-5	Dibutyltin	22.2		2.4	0.75
2406-65-7	Monobutyltin	9.3	U J	9.3	9.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	97		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 MS
Client Smp ID: SED-035-SIV-SD
Inj Date : 02-JUN-2011 16:06
Operator : WBR
Smp Info : 200-5311-A-1-D MS
Misc Info : 200-5311-A-1-D MS
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5
Inst ID: 2860_1.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
QC Sample: MS
Compound Sublist: all.sub
Sample Matrix: SOIL

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

CONCENTRATIONS				
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	=====	=====	=====	=====

* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
3.075	3.017 (0.000)	699316	500.000	(M)

2	Tetrabutyltin			CAS #: 1461-25-2
5.302	5.276 (1.000)	453099	461.830	461.8

3	Tributyltin			CAS #: 688-73-3
6.320	6.295 (1.000)	540716	425.669	425.7

4	Dibutyltin			CAS #: 1002-53-5
7.215	7.191 (1.000)	556583	355.760	355.8

\$ 5	Triphenyltin			CAS #: 3342-67-4
7.574	7.554 (1.000)	410828	435.206	435.2

Data File: 02jun111106-r061.d
Report Date: 03-Jun-2011 13:02

Page 2

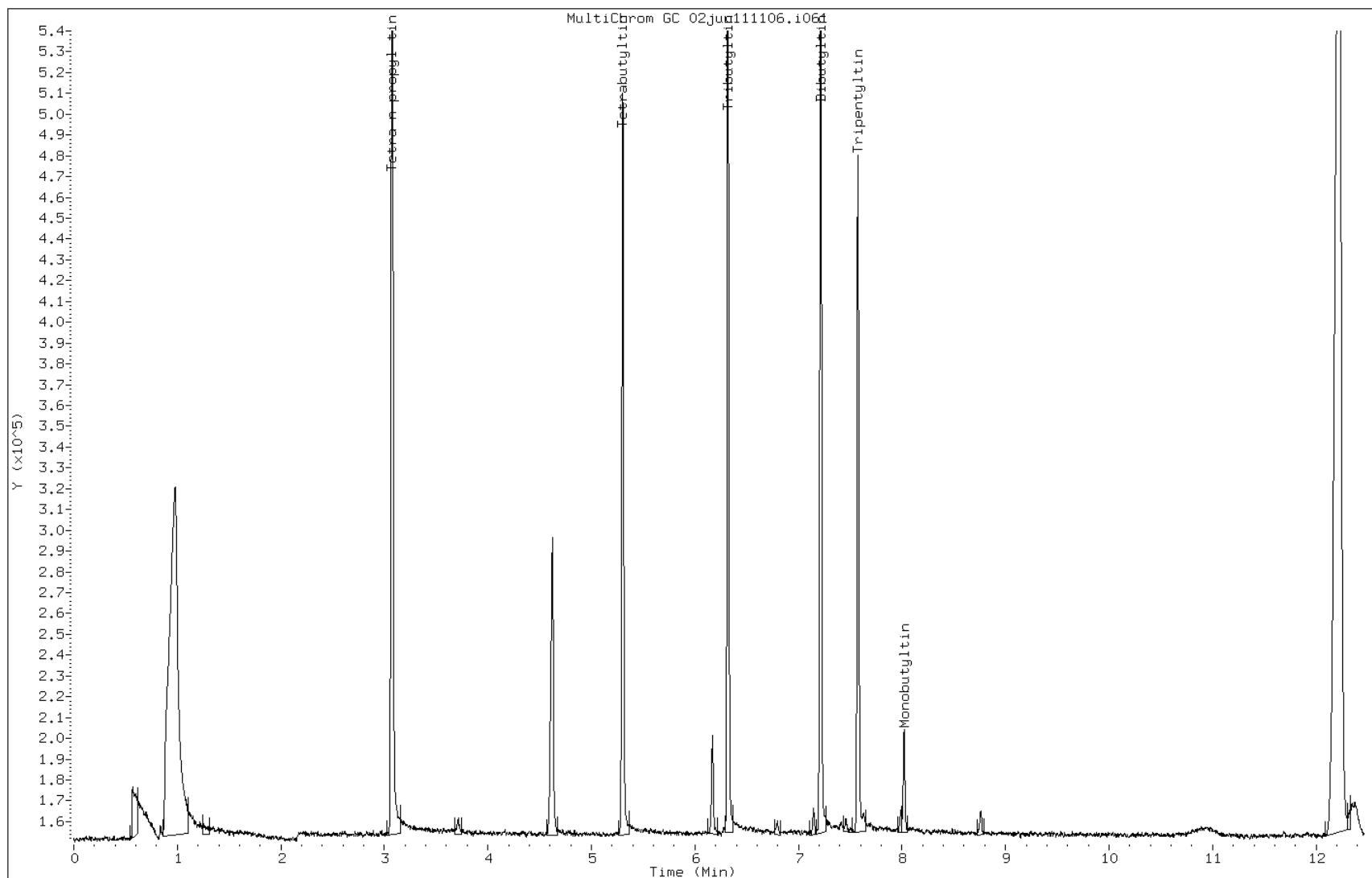
		CONCENTRATIONS	
		ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
6 Monobutyltin		CAS #: 2406-65-7	
8.020	7.996 (1.000)	64527 46.2223	46.22 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: 02jun111106-r061.d
Client ID: SED-035-SIV-SD
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: 200-5311-A-1-D MS
Lab Sample ID: 200-5311-1 MS

Date: 02-JUN-2011 16:06
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



Manual Integration Report

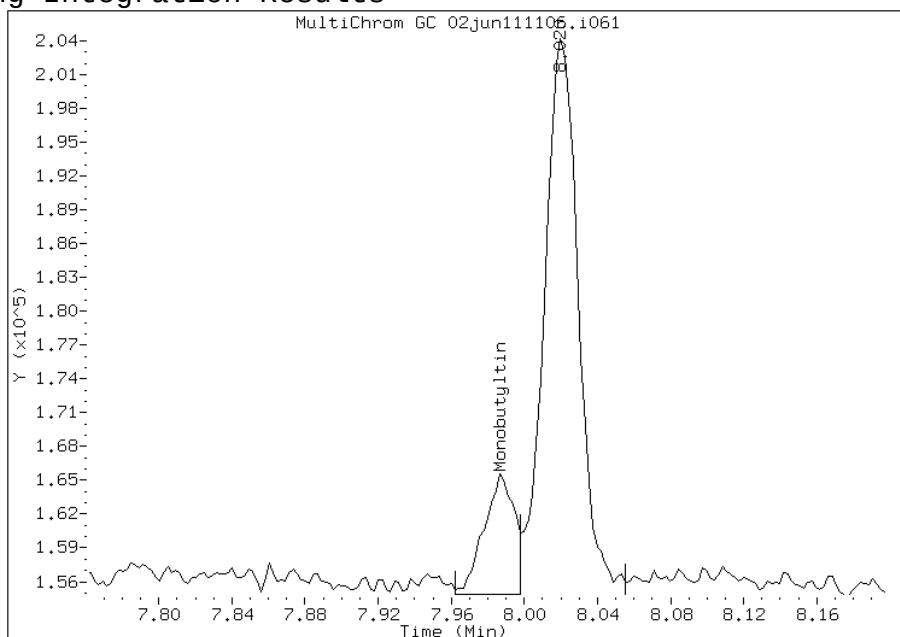
Data File: 02jun111106-r061.d
Lab Sample ID: 200-5311-1 MS
Inj. Date and Time: 02-JUN-2011 16:06
Instrument ID: 2860_1.i
Client ID: SED-035-SIV-SD
Compound: 6 Monobutyltin
CAS #: 2406-65-7
Report Date: 06/06/2011

RT: 7.99 Processing Integration Results

Response: 12081

Amount: 0.000000

Conc: 0.000000



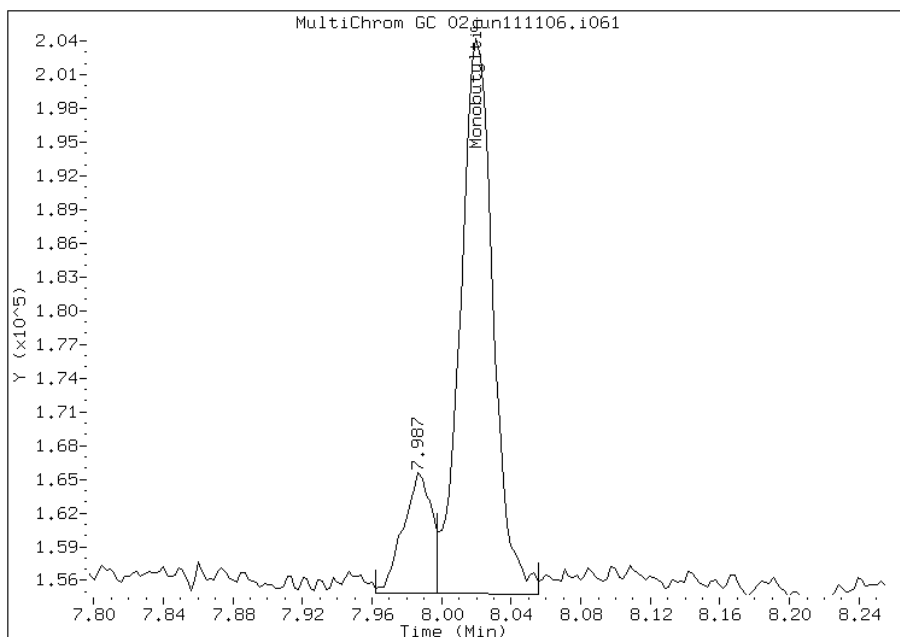
Manual Integration Results

RT: 8.02

Response: 64527

Amount: 46.22

Conc: 46.22



File Uploaded By: wbr
Manual Integration Reason: Unknown

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: SED-035-SIV-SDMS MS Lab Sample ID: 200-5311-1 MS
Matrix: Solid Lab File ID: 02jun111106-r061.d
Analysis Method: Organotins/GC Date Collected: 05/23/2011 15:00
Extraction Method: 3550B Date Extracted: 06/01/2011 17:38
Sample wt/vol: 30.92 (g) Date Analyzed: 06/02/2011 16:06
Con. Extract Vol.: 1000 (uL) Dilution Factor: 1
Injection Volume: 1.5 (uL) GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: 48.1 GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	27.5		3.2	0.82

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	90		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 MS
Client Smp ID: SED-035-SIV-SD
Inj Date : 02-JUN-2011 16:06
Operator : WBR
Smp Info : 200-5311-A-1-D MS
Misc Info : 200-5311-A-1-D MS
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5
Inst ID: 2860_2.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
QC Sample: MS
Compound Sublist: all.sub
Sample Matrix: SOIL

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		CONCENTRATIONS		
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	=====	=====	=====	=====

* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
4.327	4.300 (1.000)	640153	500.000	

2	Tetrabutyltin			CAS #: 1461-25-2
6.453	6.439 (1.491)	427565	442.150	442.2

3	Tributyltin			CAS #: 688-73-3
7.441	7.430 (1.720)	535508	429.484	429.5

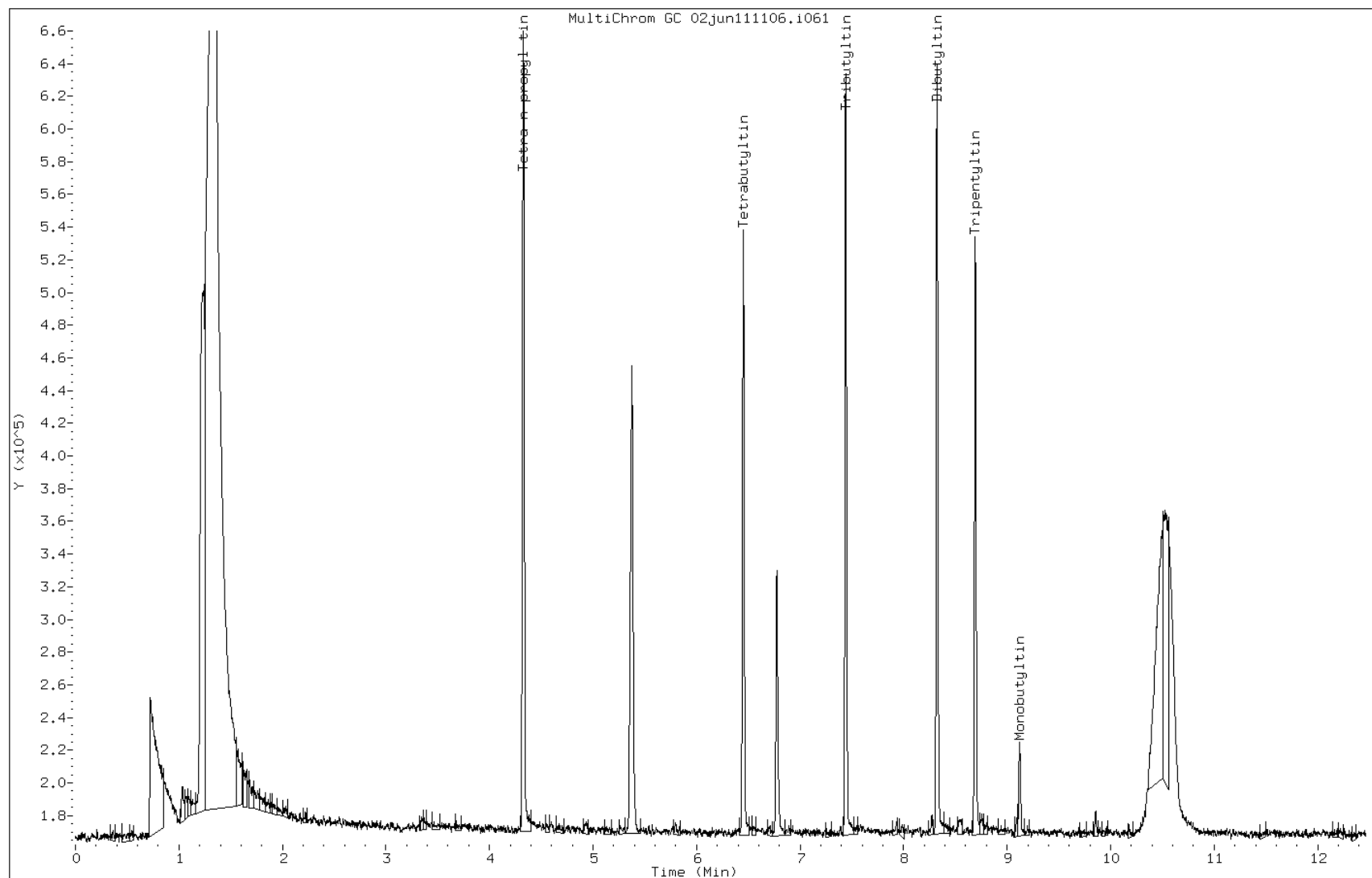
4	Dibutyltin			CAS #: 1002-53-5
8.324	8.310 (1.924)	542208	366.531	366.5

\$ 5	Triphenyltin			CAS #: 3342-67-4
8.692	8.683 (2.009)	434193	405.958	406.0

CONCENTRATIONS			
		ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
6 Monobutyltin		CAS #: 2406-65-7	
9.119	9.111 (2.108)	73137 47.5023	47.50

Data File: 02jun111106-r061.d
Client ID: SED-035-SIV-SD
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: 200-5311-A-1-D MS
Lab Sample ID: 200-5311-1 MS

Date: 02-JUN-2011 16:06
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: SED-035-SIV-SDMS MSD Lab Sample ID: 200-5311-1 MSD
Matrix: Solid Lab File ID: 02jun111106-r071.d
Analysis Method: Organotins/GC Date Collected: 05/23/2011 15:00
Extraction Method: 3550B Date Extracted: 06/01/2011 17:38
Sample wt/vol: 30.56(g) Date Analyzed: 06/02/2011 16:23
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 1.5(uL) GC Column: RTX-35 ID: 0.32 (mm)
% Moisture: 48.1 GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
688-73-3	Tributyltin	27.0		2.8	1.3
1002-53-5	Dibutyltin	22.7		2.5	0.76
2406-65-7	Monobutyltin	9.5	U J	9.5	9.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	107		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 MSD
Client Smp ID: SED-035-SIV-SD
Inj Date : 02-JUN-2011 16:23
Operator : WBR
Smp Info : 200-5311-A-1-C MSD
Misc Info : 200-5311-A-1-C MSD
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5
Inst ID: 2860_1.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
QC Sample: MSD
Compound Sublist: all.sub
Sample Matrix: SOIL

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		CONCENTRATIONS		
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	=====	=====	=====	=====

* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
3.066	3.017 (1.000)	748605	500.000	

2	Tetrabutyltin			CAS #: 1461-25-2
5.289	5.276 (1.725)	473365	450.719	450.7

3	Tributyltin			CAS #: 688-73-3
6.306	6.295 (2.057)	583337	428.986	429.0

4	Dibutyltin			CAS #: 1002-53-5
7.202	7.191 (2.349)	603106	360.115	360.1

\$ 5	Triphenyltin			CAS #: 3342-67-4
7.563	7.554 (2.467)	485466	480.413	480.4

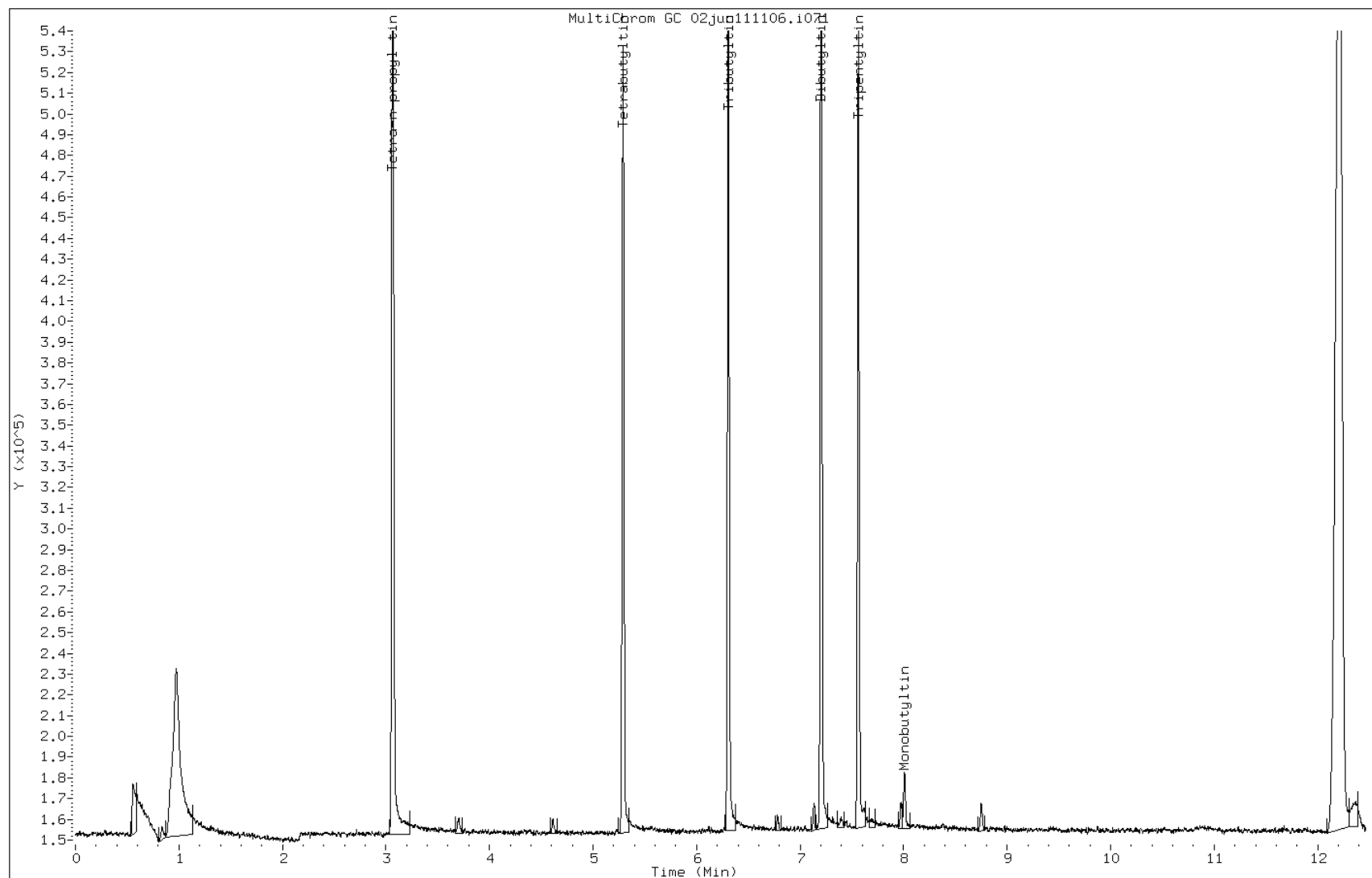
CONCENTRATIONS				
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
6 Monobutyltin				
		CAS #: 2406-65-7		
8.009	7.996 (2.612)	36624	24.5074	24.51 (aR)

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

Data File: 02jun111106-r071.d
Client ID: SED-035-SIV-SD
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: 200-5311-A-1-C MSD
Lab Sample ID: 200-5311-1 MSD

Date: 02-JUN-2011 16:23
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: SED-035-SIV-SDMS MSD Lab Sample ID: 200-5311-1 MSD
Matrix: Solid Lab File ID: 02jun111106-r071.d
Analysis Method: Organotins/GC Date Collected: 05/23/2011 15:00
Extraction Method: 3550B Date Extracted: 06/01/2011 17:38
Sample wt/vol: 30.56(g) Date Analyzed: 06/02/2011 16:23
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 1.5(uL) GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: 48.1 GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	28.4		3.2	0.83

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	109		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 MSD
Client Smp ID: SED-035-SIV-SD
Inj Date : 02-JUN-2011 16:23
Operator : WBR
Smp Info : 200-5311-A-1-C MSD
Misc Info : 200-5311-A-1-C MSD
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5
Inst ID: 2860_2.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
QC Sample: MSD
Compound Sublist: all.sub
Sample Matrix: SOIL

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

CONCENTRATIONS				
		ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	=====	=====	=====	=====

* 1	Tetra-n-propyl tin			CAS #: 2176-98-9
4.327	4.300 (1.000)	645270	500.000	

2	Tetrabutyltin			CAS #: 1461-25-2
6.450	6.439 (1.491)	438748	450.117	450.1

3	Tributyltin			CAS #: 688-73-3
7.439	7.430 (1.719)	553035	440.024	440.0

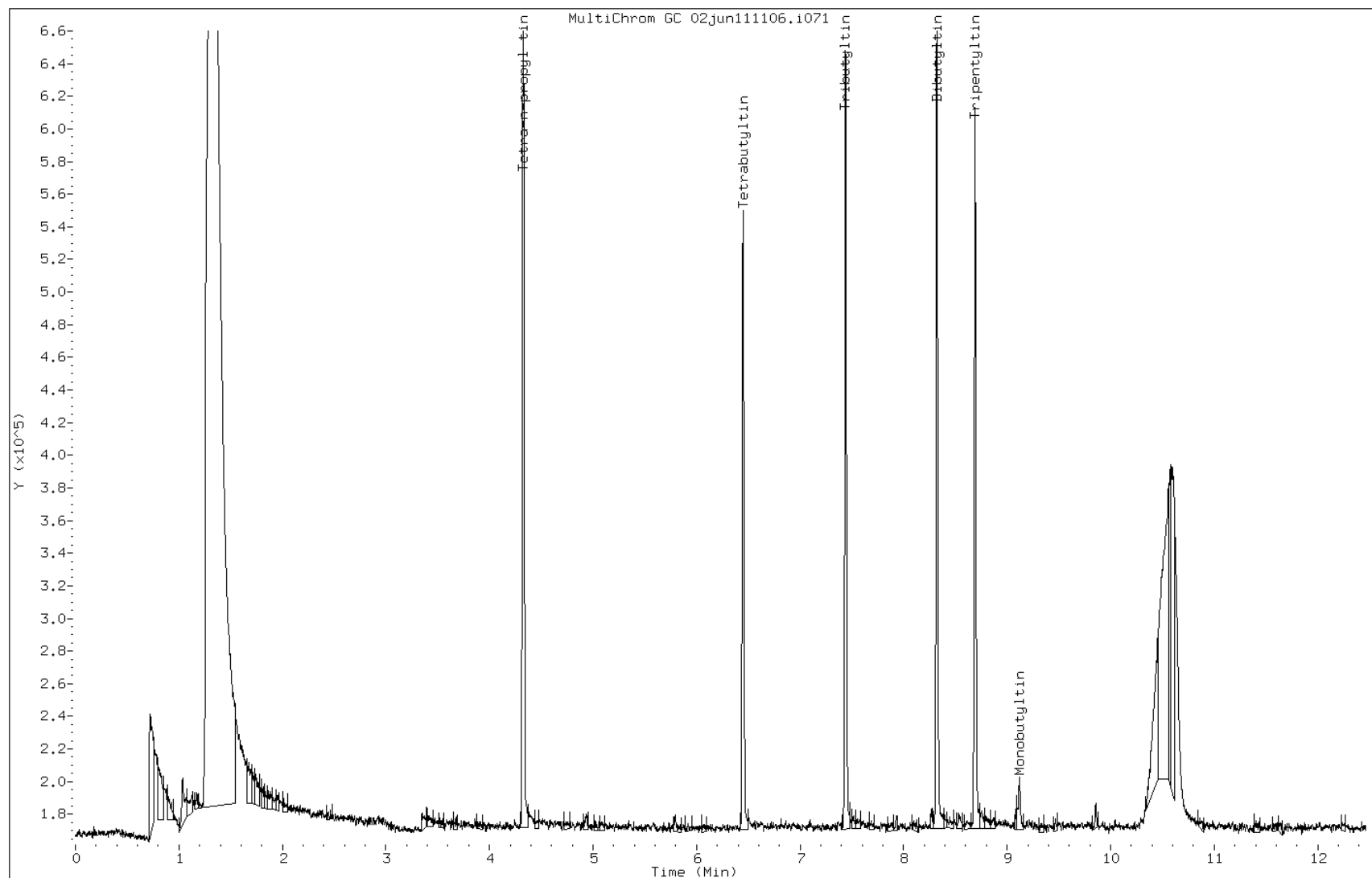
4	Dibutyltin			CAS #: 1002-53-5
8.321	8.310 (1.923)	581159	389.747	389.7

\$ 5	Triphenyltin			CAS #: 3342-67-4
8.692	8.683 (2.009)	529582	491.217	491.2

CONCENTRATIONS			
		ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
6 Monobutyltin		CAS #: 2406-65-7	
9.119	9.111 (2.108)	50558 32.5769	32.58

Data File: 02jun111106-r071.d
Client ID: SED-035-SIV-SD
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: 200-5311-A-1-C MSD
Lab Sample ID: 200-5311-1 MSD

Date: 02-JUN-2011 16:23
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-5311-1</u>
SDG No.: <u>5311</u>	
Client Sample ID: <u>SED-035-SIV-SDMS DU</u>	Lab Sample ID: <u>200-5311-1 DU</u>
Matrix: <u>Solid</u>	Lab File ID: <u>02jun111106-r041.d</u>
Analysis Method: <u>Organotins/GC</u>	Date Collected: <u>05/23/2011 15:00</u>
Extraction Method: <u>3550B</u>	Date Extracted: <u>06/01/2011 17:38</u>
Sample wt/vol: <u>30.20(g)</u>	Date Analyzed: <u>06/02/2011 15:32</u>
Con. Extract Vol.: <u>1000(uL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1.5(uL)</u>	GC Column: <u>RTX-35</u> ID: <u>0.32 (mm)</u>
% Moisture: <u>45.6</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>19104</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	3.1	U	3.1	0.80
688-73-3	Tributyltin	2.7	U	2.7	1.2
1002-53-5	Dibutyltin	2.4	U	2.4	0.73
2406-65-7	Monobutyltin	9.1	U J	9.1	9.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	103		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 DU
 Client Smp ID: SED-035-SIV-SDMS
 Inj Date : 02-JUN-2011 15:32
 Operator : WBR
 Smp Info : 200-5311-A-1-B DU
 Misc Info : 200-5311-A-1-B DU
 Comment :
 Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
 Meth Date : 03-Jun-2011 12:51 wbr
 Cal Date : 02-JUN-2011 13:50
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.50
 Processing Host: chemsvr5

Inst ID: 2860_1.i
 Quant Type: ISTD
 Cal File: 02jun110958-r071.d
 Compound Sublist: all.sub
 Sample Matrix: SOIL

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

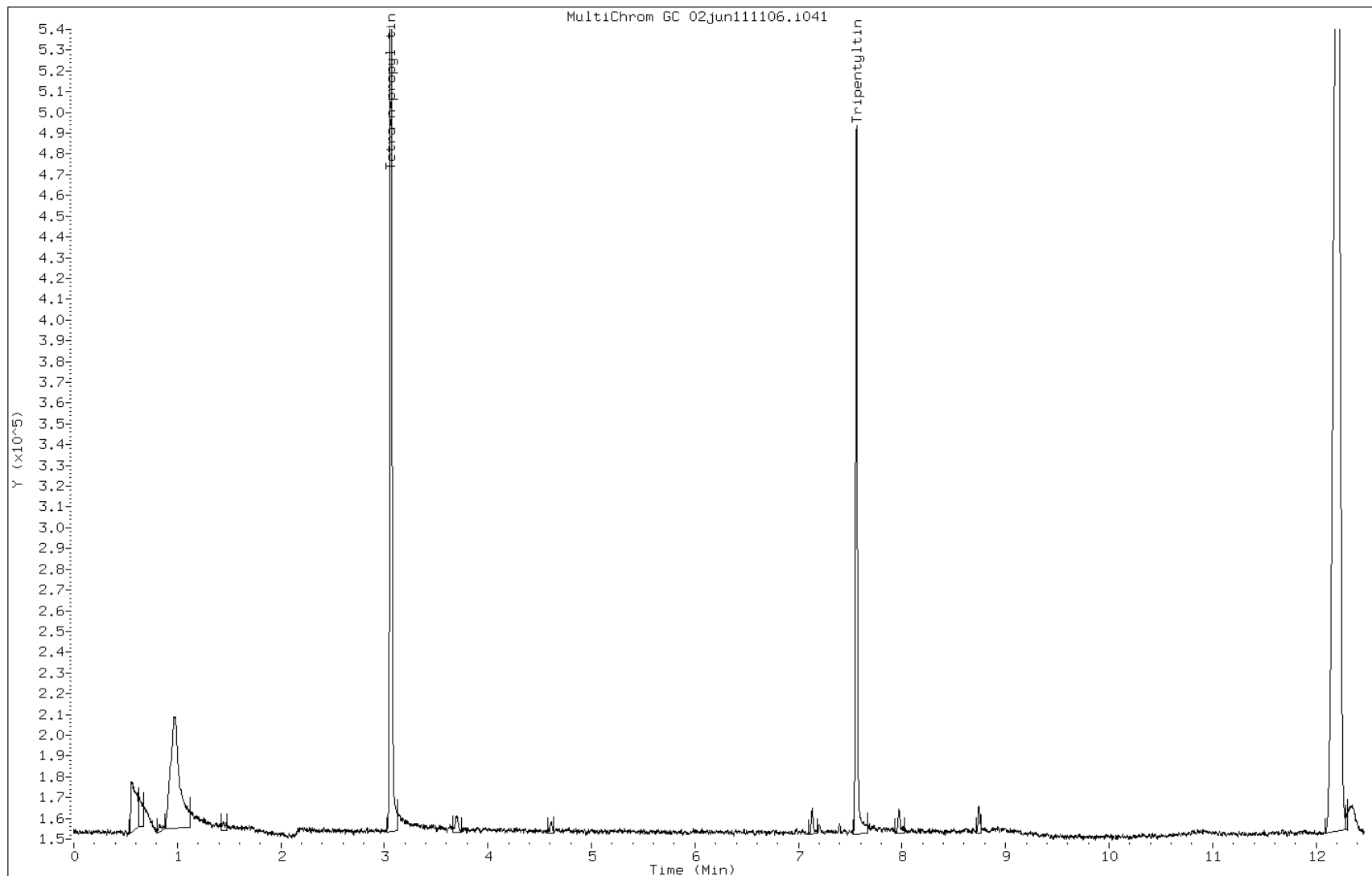
Cpnd Variable Local Compound Variable

CONCENTRATIONS				
RT	EXP RT (REL RT)	ON-COL		FINAL
		RESPONSE (ug/L)		(ug/L)
==	=====	=====	=====	=====
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
3.063	3.017 (1.000)	706581	500.000	

\$ 5 Tripentyltin				CAS #: 3342-67-4
7.561	7.554 (2.468)	440301	461.633	461.6

Data File: 02jun111106-r041.d
Client ID: SED-035-SIV-SDMS
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: 200-5311-A-1-B DU
Lab Sample ID: 200-5311-1 DU

Date: 02-JUN-2011 15:32
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1
SDG No.: 5311
Client Sample ID: SED-035-SIV-SDMS DU Lab Sample ID: 200-5311-1 DU
Matrix: Solid Lab File ID: 02jun111106-r041.d
Analysis Method: Organotins/GC Date Collected: 05/23/2011 15:00
Extraction Method: 3550B Date Extracted: 06/01/2011 17:38
Sample wt/vol: 30.20(g) Date Analyzed: 06/02/2011 15:32
Con. Extract Vol.: 1000(uL) Dilution Factor: 1
Injection Volume: 1.5(uL) GC Column: RTX-5 ID: 0.32(mm)
% Moisture: 45.6 GPC Cleanup: (Y/N) N
Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	95		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 DU
Client Smp ID: SED-035-SIV-SDMS
Inj Date : 02-JUN-2011 15:32
Operator : WBR
Smp Info : 200-5311-A-1-B DU
Misc Info : 200-5311-A-1-B DU
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr
Cal Date : 02-JUN-2011 13:50
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.50
Processing Host: chemsvr5
Inst ID: 2860_2.i
Quant Type: ISTD
Cal File: 02jun110958-r071.d
Compound Sublist: all.sub
Sample Matrix: SOIL

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

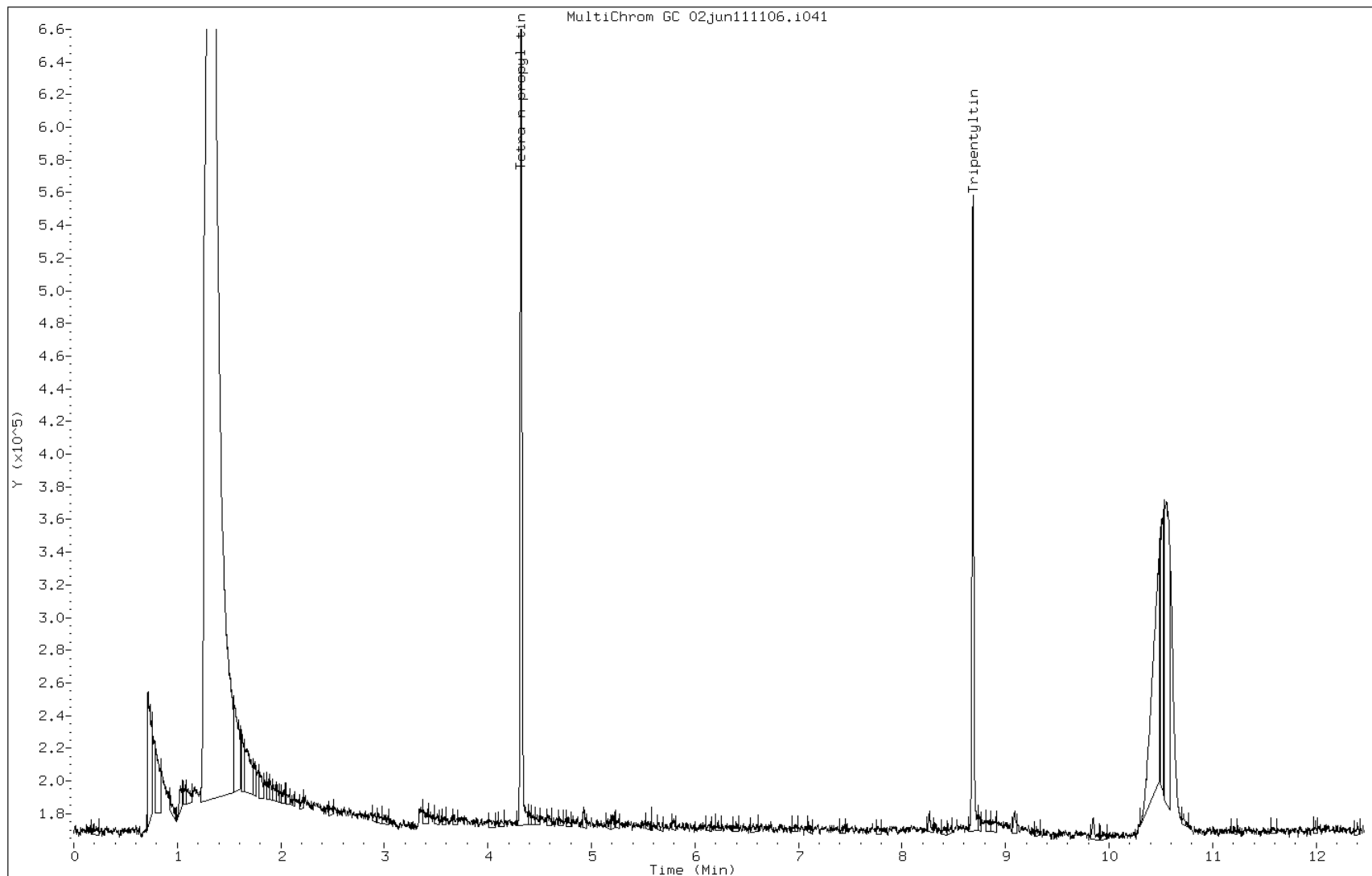
Cpnd Variable Local Compound Variable

		CONCENTRATIONS	
		ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE (ug/L)	(ug/L)
==	=====	=====	=====
* 1	Tetra-n-propyl tin		CAS #: 2176-98-9
4.320	4.300 (1.000)	652805	500.000

\$ 5	Tripentyltin		CAS #: 3342-67-4
8.685	8.683 (2.010)	468704	429.731
		429.7	

Data File: 02jun111106-r041.d
Client ID: SED-035-SIV-SDMS
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: 200-5311-A-1-B DU
Lab Sample ID: 200-5311-1 DU

Date: 02-JUN-2011 15:32
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



GC INSTRUMENT RUN LOG TEA

Date: 06/02/11		Target Directory: 060211-1		Instrument ID: HP2860		CH: 37 & 38		Report Information:	
Analyst: WBR		Test Method: ORS60		Column Type: RTX-35, RTX-5		ISTD: 10 uL → 100 uL Extract		152818 WBR-6/6/11	
Project(s): 060111-1		ICAL Date: 06/02/11		Column Type: RTX-35, RTX-OPP2		ISTD: 5 uL → 100 uL Extract		152814	
Injection Volume		Injection Volume		Injection Volume: 3 uL					

Inj. #	Lab ID	BC	Filename / Batch	ETR / SDG	Matrix	DF	QC	Analyst	Comments / Standard Traceability
1	Blank	NA	02JUN110958	-	NA	1.0	-	-	TALS Batch 19102
2	Blank						-	-	CALIL 7084 / 7090
3	IC-131787			50ppb			✓	WBR	
4	IC-131788			100ppb			✓		
5	ICRT-131784			250ppb			✓		
6	IC-131740			500ppb			✓		ch 37 ch 38 (540000) (660000)
7	IC-131741			1000ppb			✓		
8	Blank			-			-	-	
9	ICV-131742			ICV			✓	WBR	
10	MS 200 18874	1-A	02JUN111106		S	1.0	✓		
11	LC 200 18874	2-A					✓		
12	200 534 A 1 A			500 5311			✓		
13	200 534 A 1 B	DUL					✓		* All monobutyl tin J (flange) in sample + OAC
14	200 534 A 2 A						✓		UJ
15	200 534 A 1 D	MS					✓		
16	200 534 A 1 C	MSD			S		✓		
17	MS 200 18670	1-A			W		✓		
18	LC 200 18670	2-A					✓		
19	200-5311-A3	A		5311			✓		
20	CCV-131784	-			-		✓	WBR	OK
21	200-5322-A1	A		5322	W	1.0	✓		(TST only)
22	CCV-131784	-			-		✓	WBR	OK
23									
24									
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100									

Legend: DF= Dilution Factor; RE=Reanalyze; ✓ = Reviewed and Acceptable; X = Not Acceptable; — = Not Applicable; W = Water; S = Soil; SD = Sediment; T = Tissue; BC= Bottle Code

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica BurlingtonJob No.: 200-5311-1SDG No.: 5311Instrument ID: 2860.iStart Date: 06/02/2011 12:42Analysis Batch Number: 19102End Date: 06/02/2011 14:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 200-19102/1		06/02/2011 12:42	1	02jun110958-r03 1.d	RTX-35 0.32 (mm)
IC 200-19102/1		06/02/2011 12:42	1	02jun110958-r03 1.d	RTX-5 0.32 (mm)
IC 200-19102/2		06/02/2011 12:59	1	02jun110958-r04 1.d	RTX-35 0.32 (mm)
IC 200-19102/2		06/02/2011 12:59	1	02jun110958-r04 1.d	RTX-5 0.32 (mm)
ICRT 200-19102/3		06/02/2011 13:16	1	02jun110958-r05 1.d	RTX-35 0.32 (mm)
ICRT 200-19102/3		06/02/2011 13:16	1	02jun110958-r05 1.d	RTX-5 0.32 (mm)
IC 200-19102/4		06/02/2011 13:33	1	02jun110958-r06 1.d	RTX-35 0.32 (mm)
IC 200-19102/4		06/02/2011 13:33	1	02jun110958-r06 1.d	RTX-5 0.32 (mm)
IC 200-19102/5		06/02/2011 13:50	1	02jun110958-r07 1.d	RTX-35 0.32 (mm)
IC 200-19102/5		06/02/2011 13:50	1	02jun110958-r07 1.d	RTX-5 0.32 (mm)
ICV 200-19102/6		06/02/2011 14:24	1	02jun110958-r09 1.d	RTX-35 0.32 (mm)
ICV 200-19102/6		06/02/2011 14:24	1	02jun110958-r09 1.d	RTX-5 0.32 (mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica BurlingtonJob No.: 200-5311-1SDG No.: 5311Instrument ID: 2860.iStart Date: 06/02/2011 14:41Analysis Batch Number: 19104End Date: 06/02/2011 18:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
MB 200-18879/1-A		06/02/2011 14:41	1	02jun111106-r01 1.d	RTX-35 0.32 (mm)
MB 200-18879/1-A		06/02/2011 14:41	1	02jun111106-r01 1.d	RTX-5 0.32 (mm)
LCS 200-18879/2-A		06/02/2011 14:58	1	02jun111106-r02 1.d	RTX-35 0.32 (mm)
LCS 200-18879/2-A		06/02/2011 14:58	1	02jun111106-r02 1.d	RTX-5 0.32 (mm)
200-5311-1	SED-035-SIV-SDMS	06/02/2011 15:15	1	02jun111106-r03 1.d	RTX-35 0.32 (mm)
200-5311-1	SED-035-SIV-SDMS	06/02/2011 15:15	1	02jun111106-r03 1.d	RTX-5 0.32 (mm)
200-5311-1 DU	SED-035-SIV-SDMS DU	06/02/2011 15:32	1	02jun111106-r04 1.d	RTX-35 0.32 (mm)
200-5311-1 DU	SED-035-SIV-SDMS DU	06/02/2011 15:32	1	02jun111106-r04 1.d	RTX-5 0.32 (mm)
200-5311-2	DUP03-SIV-QC-052311	06/02/2011 15:49	1	02jun111106-r05 1.d	RTX-35 0.32 (mm)
200-5311-2	DUP03-SIV-QC-052311	06/02/2011 15:49	1	02jun111106-r05 1.d	RTX-5 0.32 (mm)
200-5311-1 MS	SED-035-SIV-SDMS MS	06/02/2011 16:06	1	02jun111106-r06 1.d	RTX-35 0.32 (mm)
200-5311-1 MS	SED-035-SIV-SDMS MS	06/02/2011 16:06	1	02jun111106-r06 1.d	RTX-5 0.32 (mm)
200-5311-1 MSD	SED-035-SIV-SDMS MSD	06/02/2011 16:23	1	02jun111106-r07 1.d	RTX-35 0.32 (mm)
200-5311-1 MSD	SED-035-SIV-SDMS MSD	06/02/2011 16:23	1	02jun111106-r07 1.d	RTX-5 0.32 (mm)
MB 200-18670/1-A		06/02/2011 16:40	1	02jun111106-r08 1.d	RTX-35 0.32 (mm)
MB 200-18670/1-A		06/02/2011 16:40	1	02jun111106-r08 1.d	RTX-5 0.32 (mm)
LCS 200-18670/2-A		06/02/2011 16:56	1	02jun111106-r09 1.d	RTX-35 0.32 (mm)
LCS 200-18670/2-A		06/02/2011 16:56	1	02jun111106-r09 1.d	RTX-5 0.32 (mm)
200-5311-3	FB08-SIV-052311	06/02/2011 17:13	1	02jun111106-r10 1.d	RTX-35 0.32 (mm)
200-5311-3	FB08-SIV-052311	06/02/2011 17:13	1	02jun111106-r10 1.d	RTX-5 0.32 (mm)
CCV 200-19104/11		06/02/2011 17:30	1	02jun111106-r11 1.d	RTX-35 0.32 (mm)
CCV 200-19104/11		06/02/2011 17:30	1	02jun111106-r11 1.d	RTX-5 0.32 (mm)
ZZZZZ		06/02/2011 17:47	1		RTX-35 0.32 (mm)
ZZZZZ		06/02/2011 17:47	1		RTX-5 0.32 (mm)
CCV 200-19104/13		06/02/2011 18:04	1		RTX-35 0.32 (mm)
CCV 200-19104/13		06/02/2011 18:04	1		RTX-5 0.32 (mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1SDG No.: 5311Batch Number: 18670 Batch Start Date: 05/26/11 20:40 Batch Analyst: Fodge, John FBatch Method: 3510C Batch End Date: 05/31/11 21:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	FirstAdjustpH	EXHexMagBr 00002	EXTinMTXSPi 00006
MB 200-18670/1		3510C, Organotins/G C		7	1000 mL	1000 uL	<2	0.8 mL	
LCS 200-18670/2		3510C, Organotins/G C		7	1000 mL	1000 uL	<2	0.8 mL	0.5 mL
200-5311-A-3	FB08-SIV-052311	3510C, Organotins/G C	T	7	1040 mL	1000 uL	<2	0.8 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXTINSUi 00007	EXTriethylami 00004				
MB 200-18670/1		3510C, Organotins/G C		0.5 mL	150 uL				
LCS 200-18670/2		3510C, Organotins/G C		0.5 mL	150 uL				
200-5311-A-3	FB08-SIV-052311	3510C, Organotins/G C	T	0.5 mL	150 uL				

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1SDG No.: 5311Batch Number: 18670 Batch Start Date: 05/26/11 20:40 Batch Analyst: Fodge, John FBatch Method: 3510C Batch End Date: 05/31/11 21:45

Batch Notes	
Acid used for pH adjustment	HCL
Acid used for pH adjust Lot #	127224
Batch Comment	Batch derivitized on 5/31/11 by DI; 1:1 HCl:H2O Lot# 127225
Concentration End Time	2245
Concentration Start Time	2120
Person's name who did the concentration	JFF/DI
Final Concentrator Volume	1.0 mL
Florisil Lot #	Tin Cartridge Lot# 25410
Na2SO4 Lot Number	145544
Prep Solvent Lot #	143457 / 109081
Prep Solvent Name	0.05% Tropolone / Hexane
Prep Solvent Volume Used	180 mL
Person's name who did the prep	JFF
Person's name who witnessed reagent drop	TPB
Sufficient volume for MS/MSD?	No

Basis	Basis Description
T	Total/NA

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1SDG No.: 5311Batch Number: 18879 Batch Start Date: 06/01/11 17:38 Batch Analyst: Bourdeau, Timothy PBatch Method: 3550B Batch End Date: 06/01/11 22:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Copper_S 00022	ex50%HCl 00008	EXHexMagBr 00002	EXTinMTXSPi 00006
MB 200-18879/1		3550B, Organotins/G C		30.00 g	1000 uL	3 g	10 mL	800 uL	
LCS 200-18879/2		3550B, Organotins/G C		30.00 g	1000 uL	3 g	10 mL	800 uL	0.5 mL
200-5311-A-1	SED-035-SIV-SDMS	3550B, Organotins/G C	T	30.26 g	1000 uL	6 g	10 mL	800 uL	
200-5311-A-1 DU	SED-035-SIV-SDMS	3550B, Organotins/G C	T	30.20 g	1000 uL	6 g	10 mL	800 uL	
200-5311-A-1 MSD	SED-035-SIV-SDMS	3550B, Organotins/G C	T	30.56 g	1000 uL	6 g	10 mL	800 uL	0.5 mL
200-5311-A-1 MS	SED-035-SIV-SDMS	3550B, Organotins/G C	T	30.92 g	1000 uL	6 g	10 mL	800 uL	0.5 mL
200-5311-A-2	DUP03-SIV-QC-052 311	3550B, Organotins/G C	T	30.78 g	1000 uL	6 g	10 mL	800 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXTINSUi 00007	EXTriethylami 00004	AnalysisComment			
MB 200-18879/1		3550B, Organotins/G C		0.5 mL	150 uL				
LCS 200-18879/2		3550B, Organotins/G C		0.5 mL	150 uL				
200-5311-A-1	SED-035-SIV-SDMS	3550B, Organotins/G C	T	0.5 mL	150 uL	Sample copper cleaned twice.			
200-5311-A-1 DU	SED-035-SIV-SDMS	3550B, Organotins/G C	T	0.5 mL	150 uL	Sample copper cleaned twice.			
200-5311-A-1 MSD	SED-035-SIV-SDMS	3550B, Organotins/G C	T	0.5 mL	150 uL	Sample copper cleaned twice.			
200-5311-A-1 MS	SED-035-SIV-SDMS	3550B, Organotins/G C	T	0.5 mL	150 uL	Sample copper cleaned twice.			

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1SDG No.: 5311Batch Number: 18879 Batch Start Date: 06/01/11 17:38 Batch Analyst: Bourdeau, Timothy PBatch Method: 3550B Batch End Date: 06/01/11 22:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXTINSUi 00007	EXTriethylami 00004	AnalysisComment			
200-5311-A-2	DUP03-SIV-QC-052 311	3550B, Organotins/G C	T	0.5 mL	150 uL	Sample copper cleaned twice.			

Batch Notes	
Batch Comment	Tin Catridge lot# 25410
Concentration End Time	22:35
Concentration Start Time	22:00
Person's name who did the concentration	TPB
Copper Lot #	146086
Exchange Solvent Lot #	138283
Exchange Solvent Name	Hexane
Final Concentrator Volume	1.0 mL
Na2SO4 Lot Number	145546
Nominal Amount Used	30 g
Prep Solvent Lot #	138283/144134
Prep Solvent Name	Hexane/Tropolone
Prep Solvent Volume Used	300 mL
Person's name who witnessed reagent drop	JFF
Vendor of Reagent used	JT Baker

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Burlington Job Number: 200-5311-1

SDG No.: 5311

Project: CDM Organotin Project

Client Sample ID	Lab Sample ID
<u>SED-035-SIV-SDMS</u>	<u>200-5311-1</u>
<u>DUP03-SIV-QC-052311</u>	<u>200-5311-2</u>

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Burlington

Job Number: 200-5311-1

SDG Number: 5311

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

RL Date: 04/01/2009 07:55

Analyte	Wavelength/ Mass	RL (%)	
Percent Solids		0.1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Instrument ID: NOEQUIP Method: Moisture

Start Date: 05/25/2011 14:02 End Date: 05/25/2011 14:02

Lab Sample ID	D / F	T y p e	Time	Analytes																	
				% S o l																	
200-5311-1	1	T	14:02	X																	
200-5311-1 DU	1	T	14:02	X																	
200-5311-2	1	T	14:02	X																	

Prep Types

T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1SDG No.: 5311Batch Number: 18581 Batch Start Date: 05/25/11 14:02 Batch Analyst: Nelson, Andrea JBatch Method: Moisture Batch End Date: 05/26/11 08:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
200-5311-A-1	SED-035-SIV-SDMS	Moisture	T	1	1.01 g	10.04 g	5.70 g		
200-5311-A-1 DU	SED-035-SIV-SDMS	Moisture	T	2	1.00 g	10.40 g	6.11 g		
200-5311-A-2	DUP03-SIV-QC-052 311	Moisture	T	3	1.01 g	10.20 g	5.98 g		

Batch Notes	
Balance ID	M78711 No Unit
Date samples were place in the oven	05/25/2011
Oven Temp when samples are put in oven	106 Degrees C
Time samples were place in the oven	1411
Date samples were removed from oven	05/26/2011
Oven Temp when samples removed from oven	106 Degrees C
Time Samples were removed from oven	0822
Oven ID	2
ID number of the thermometer	140

Basis	Basis Description
T	Total/NA

Shipping and Receiving Documents



IN ID: LKEA (206) 622-6960
RON VALENTINE
FRONTIER GLOBAL SCIENCES INC.
414 PONTIUS AVE N

SEATTLE, WA 98109
UNITED STATES US

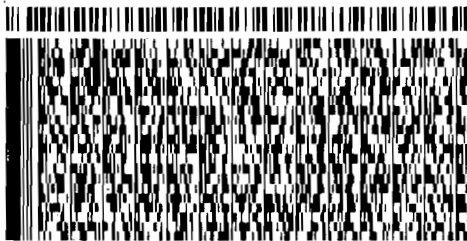
SHIP DATE: 25MAY11
ACTWGT: 11.5 LB
CAD: 733201/CAFE2472
DIMS: 13x10x10 IN

BILL THIRD PARTY

SAMPLE RECEIPT
TEST AMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
BURLINGTON VT 05403

(802) 660-1990
DEPT: AL

REF: ALOVJNSAMPLEFORWARD



FedEx
Express



J10101009010124

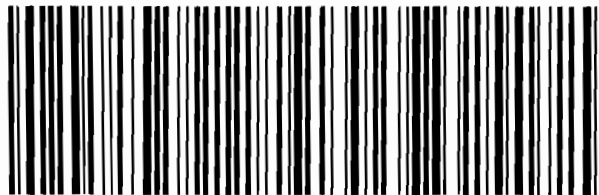
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THU - 26 MAY A4
PRIORITY OVERNIGHT

XH BTVA

05403
VT-US
BTV

Part # 150145-134 K70T 04-03



505C1/1577/DR47



Analysis Request / Environmental Services Subcontracting Form

For Lancaster Laboratories Use Only
Acct: 13013 Group No.: 1248314 Sample Nos.: 6296498-500 Date: 5/24/2011

Subcontractor: TEST AMERICA - BURLINGTON		LLI P.O.#:		Courier:	Fed Ex
Submit report to: <u>Kathy Binkley</u>		Submit invoice to: <u>Kathy Binkley</u>		Ext.: <u>1393</u>	
State where samples were collected: <u>CA</u>					
Sample Identification	Date Collected	Time Collected	Grab	Composite	
SED-035-SIV-SD	05/23/11	15:00	X	X	
DUP01-SIV-SD	05/23/11	15:10	X	X	
FB075-SS-052311	05/23/11	16:00	X	X	
185 of 188					
Turnaround Time Requested (TAT): <u>Standard</u> Rush					
Date Results are Needed: _____					
Email Results to: <u>kbinkley@lancasterlabs.com</u>					
Data Package Options (circled when required)			SDG Complete? Yes No		
Type I (validation/NJ Reg)			Type VI (Raw Data)		
Type II (Tier II)			Type III (Reduced NJ)		
Type IV (CLP SOW)			TX TRRP-13		
Site-specific QC Required (MS/MSD/DUP)? Yes No			Internal Chain of Custody Required? Yes No		
MA MCP			CT RCP		
Analyses Requested					
Preservation Codes					
Matrix					
Soil					
Water					
Other					
Total # of Containers					
Organotin					
Preservation Codes					
H=HCl T=Thiosulfate					
N=HNO ₃ B=NaOH					
S=H ₂ SO ₄ O=Other					
Comments:					
Temperature of samples upon receipt (if requested)					

Madison, Jim

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]
Sent: Thursday, June 02, 2011 1:14 PM
To: Madison, Jim
Subject: Change to Sample IDs & Pricing Question

Hi Jim,
Please update the sample IDs for the samples that I sent you last week.

SED-035-SIV-SD is now SED-035-SIV-SDMS
DUP01-SIV-SD is now DUP03-SIV-QC-052311
FB07-SIV-SS-052311 is now FB08-SIV-052311

Also, can you send me a pricing estimate for these samples?

Thanks!
Nicole

Nicole L. Maljovec | Lancaster Laboratories | Group Leader, Environmental Client Services | 717 656.2300
x1537 | Fax 717 656.6766
2425 New Holland Pike | PO Box 12425 | Lancaster, PA 17601-2425 | NMaljovec@lancasterlabs.com

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Thank you. If you wish to view information about Lancaster Laboratories, Inc., please visit our website at www.lancasterlabs.com

Login Sample Receipt Checklist

Client: Lancaster Laboratories

Job Number: 200-5311-1

SDG Number: 5311

Login Number: 5311

List Number: 1

Creator: Marion, Greg T

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0°C IR GUN ID 96/CF= 0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: Lancaster Laboratories

Job Number: 200-5311-1

SDG Number: 5311

Login Number: 5311

List Number: 2

Creator: Marion, Greg T

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	NO SEAL NUMBERS
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.2°C IR GUN ID 96/CF= 0
COC is present.	False	REPLACEMENT VOLUME FOR SAMPLES RECEIVED 5/25/11
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the sample IDs on the containers and the COC.	N/A	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	Lab does not accept radioactive samples.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

November 04, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 05/24/2011

Group Number: 1248215

SDG: DE159

PO Number: 1203-004-008-AL

Release Number: TRACKING #12090

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-084-SA5DN-SB-4.0-5.0 Soil	6296035
SL-089-SA5DN-SB-4.0-5.0 Soil	6296036
SL-081-SA5DN-SB-4.0-5.0 Soil	6296037
SL-081-SA5DN-SB-9.0-10.0 Soil	6296038
SL-075-SA5DN-SB-4.0-5.0 Soil	6296039
SL-075-SA5DN-SB-9.0-10.0 Soil	6296040
TB-052311 Water	6296041
SL-015-SA5DN-SS-0.0-0.5 Soil	6296042
SL-016-SA5DN-SS-0.0-0.5 Soil	6296043
SL-017-SA5DN-SS-0.0-0.5 Soil	6296044
SL-019-SA5DN-SS-0.0-0.5 Soil	6296045
SL-021-SA5DN-SS-0.0-0.5 Soil	6296046
SL-022-SA5DN-SS-0.0-0.5 Soil	6296047
SL-022-SA5DN-SS-0.0-0.5MS Soil	6296048
SL-022-SA5DN-SS-0.0-0.5MSD Soil	6296049
SL-022-SA5DN-SS-0.0-0.5DUP Soil	6296050
SL-023-SA5DN-SS-0.0-0.5 Soil	6296051
SL-052-SA5DN-SS-0.0-0.5 Soil	6296052
SL-053-SA5DN-SS-0.0-0.5 Soil	6296053
DUP05-SA5DN-QC-052311 Soil	6296054
EB05-SA5DN-SS-052311 Water	6296055
SED-035-SIV-SD Sediment	6296056

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

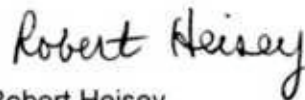
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ELECTRONIC CDM Federal Services Program
COPY TO
1 COPY TO Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey
Senior Specialist

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.0 J	6.9	8.3		0.93
06192	Benzene	71-43-2	0.10 U	0.10	4.1		0.93
06192	Bromobenzene	108-86-1	0.13 U	0.13	4.1		0.93
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.1		0.93
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.1		0.93
06192	Bromoform	75-25-2	0.41 U	0.41	4.1		0.93
06192	Bromomethane	74-83-9	0.26 U	0.26	4.1		0.93
06192	2-Butanone	78-93-3	1.3 U	1.3	8.3		0.93
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.1		0.93
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.1		0.93
06192	tert-Butylbenzene	98-06-6	0.16 U	0.16	4.1		0.93
06192	Carbon Tetrachloride	56-23-5	0.14 U	0.14	4.1		0.93
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.1		0.93
06192	Chloroethane	75-00-3	0.13 U	0.13	4.1		0.93
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.1		0.93
06192	Chloroform	67-66-3	0.12 U	0.12	4.1		0.93
06192	Chloromethane	74-87-3	0.34 U	0.34	4.1		0.93
06192	2-Chlorotoluene	95-49-8	0.14 U	0.14	4.1		0.93
06192	4-Chlorotoluene	106-43-4	0.14 U	0.14	4.1		0.93
06192	Chlorotrifluoroethene	79-38-9	0.52 U	0.52	5.2		0.93
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.72 U	0.72	4.1		0.93
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.1		0.93
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.1		0.93
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.1		0.93
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.1		0.93
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.1		0.93
06192	1,4-Dichlorobenzene	106-46-7	0.16 U	0.16	4.1		0.93
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.1		0.93
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.1		0.93
06192	1,2-Dichloroethane	107-06-2	0.15 U	0.15	4.1		0.93
06192	1,1-Dichloroethene	75-35-4	0.40 U	0.40	4.1		0.93
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.1		0.93
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.1		0.93
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.1		0.93
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.1		0.93
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.1		0.93
06192	1,1-Dichloropropene	563-58-6	0.13 U	0.13	4.1		0.93
06192	cis-1,3-Dichloropropene	10061-01-5	0.16 U	0.16	4.1		0.93
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.1		0.93
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.1		0.93
06192	Freon 113	76-13-1	0.11 U	0.11	4.1		0.93
06192	Freon 133a	75-88-7	0.52 U	0.52	5.2		0.93
06192	Hexachlorobutadiene	87-68-3	0.14 U	0.14	4.1		0.93
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.3		0.93
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.1		0.93
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.1		0.93
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.1		0.93
06192	4-Methyl-2-pentanone	108-10-1	0.40 U	0.40	8.3		0.93
06192	Methylene Chloride	75-09-2	1.2 J	0.25	4.1		0.93
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.1		0.93

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.1		0.93
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.1		0.93
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.1		0.93
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.1		0.93
06192	Toluene	108-88-3	0.08 U	0.08	4.1		0.93
06192	1,2,3-Trichlorobenzene	87-61-6	0.14 U	0.14	4.1		0.93
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.1		0.93
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.1		0.93
06192	1,1,2-Trichloroethane	79-00-5	0.28 U	0.28	4.1		0.93
06192	Trichloroethene	79-01-6	0.15 U	0.15	4.1		0.93
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.1		0.93
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.1		0.93
06192	1,2,4-Trimethylbenzene	95-63-6	0.41 U	0.41	4.1		0.93
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.1		0.93
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.1		0.93
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.1		0.93
06192	o-Xylene	95-47-6	0.18 U	0.18	4.1		0.93
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.5 U	5.5	16		24.85
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	74	U 74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1

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Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U 74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	74	U 74	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U 0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U 0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U 0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U 0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U 0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U 0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	20		1

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Analysis Report

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REVISED

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Chrysene	218-01-9	0.36 U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73 U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5 U	6.5	20		1
10138	Fluoranthene	206-44-0	0.73 U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73 U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73 U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20		1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66 U	66	130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44 U	44	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88 U	88	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88 U	88	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	44 U	44	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	44 U	44	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	44 U	44	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	330	1000000 0	1
10132	Nitrobenzene	98-95-3	44 U	44	130	1000000 0	1
10132	Nitroglycerin	55-63-0	880 U	880	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	88 U	88	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	88 U	88	130	1000000 0	1
10132	PETN	78-11-5	880 U	880	2,700	1000000 0	1
10132	RDX	121-82-4	55 U	55	130	1000000 0	1
10132	Tetryl	479-45-8	68 U	68	130	1000000 0	1

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Analysis Report

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REVISED

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	44 U	44	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44 U	44	130	10000000	1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36 U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36 U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36 U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43 U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	23,100	5.35	21.3		1
07914	Boron	7440-42-8	0.947 U	0.947	5.32		1
01650	Calcium	7440-70-2	33,200	6.52	21.3		1
01654	Iron	7439-89-6	24,000	5.01	21.3		1
01656	Lithium	7439-93-2	23.5	0.23	2.1		1
01657	Magnesium	7439-95-4	4,850	2.70	10.6		1
06958	Manganese	7439-96-5	211	0.0830	0.532		1
10145	Phosphorus	7723-14-0	224	0.596	10.6		1
01662	Potassium	7440-09-7	2,100	19.1	53.2		1
01667	Sodium	7440-23-5	261	39.7	106		1
07968	Strontium	7440-24-6	44.6	0.0659	0.532		1
06969	Tin	7440-31-5	2.79 J	1.06	10.6		1
06970	Titanium	7440-32-6	1,310	0.404	1.06		1
10146	Zirconium	7440-67-7	4.74 J	0.893	5.32		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.259	0.0664	0.221		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.95	0.0885	0.442		2
06126	Barium	7440-39-3	167	0.119	0.442		2
06127	Beryllium	7440-41-7	0.867	0.0177	0.111		2
06128	Cadmium	7440-43-9	0.153	0.0442	0.111		2
06131	Chromium	7440-47-3	20.7	0.133	0.442		2
06132	Cobalt	7440-48-4	4.97	0.0221	0.111		2
06133	Copper	7440-50-8	14.0	0.0730	0.442		2
06135	Lead	7439-92-1	10.6	0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.605	0.0553	0.111		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06139	Nickel	7440-02-0	20.0	0.111	0.442		2
06141	Selenium	7782-49-2	0.0788 J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0345 J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.405	0.0332	0.111		2
06148	Vanadium	7440-62-2	77.3	0.0243	0.111		2
06149	Zinc	7440-66-6	70.2	0.619	3.32		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0663 J	0.0031	0.108		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	5.9	0.88	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.2		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.85 J	0.22	1.1		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.34	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	9.6	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-084-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 16:33	Chelsea B Eastep	0.93
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 19:57	Sara E Johnson	24.85

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0844 SDG#: DE159-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:51	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 15:48	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 07:23	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 17:33	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 20:46	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:00	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:37	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:37	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:55	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0844 SDG#: DE159-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 18:48	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 15:13	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 14:50	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 10

REVISED

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.9 J	6.3	7.5		0.86
06192	Benzene	71-43-2	0.09 U	0.09	3.8		0.86
06192	Bromobenzene	108-86-1	0.12 U	0.12	3.8		0.86
06192	Bromochloromethane	74-97-5	0.31 U	0.31	3.8		0.86
06192	Bromodichloromethane	75-27-4	0.07 U	0.07	3.8		0.86
06192	Bromoform	75-25-2	0.38 U	0.38	3.8		0.86
06192	Bromomethane	74-83-9	0.24 U	0.24	3.8		0.86
06192	2-Butanone	78-93-3	1.1 U	1.1	7.5		0.86
06192	n-Butylbenzene	104-51-8	0.11 U	0.11	3.8		0.86
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	3.8		0.86
06192	tert-Butylbenzene	98-06-6	0.15 U	0.15	3.8		0.86
06192	Carbon Tetrachloride	56-23-5	0.13 U	0.13	3.8		0.86
06192	Chlorobenzene	108-90-7	0.10 U	0.10	3.8		0.86
06192	Chloroethane	75-00-3	0.12 U	0.12	3.8		0.86
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.28 U	0.28	3.8		0.86
06192	Chloroform	67-66-3	0.11 U	0.11	3.8		0.86
06192	Chloromethane	74-87-3	0.31 U	0.31	3.8		0.86
06192	2-Chlorotoluene	95-49-8	0.13 U	0.13	3.8		0.86
06192	4-Chlorotoluene	106-43-4	0.13 U	0.13	3.8		0.86
06192	Chlorotrifluoroethene	79-38-9	0.47 U	0.47	4.7		0.86
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.66 U	0.66	3.8		0.86
06192	Dibromochloromethane	124-48-1	0.19 U	0.19	3.8		0.86
06192	1,2-Dibromoethane	106-93-4	0.16 U	0.16	3.8		0.86
06192	Dibromomethane	74-95-3	0.23 U	0.23	3.8		0.86
06192	1,2-Dichlorobenzene	95-50-1	0.08 U	0.08	3.8		0.86
06192	1,3-Dichlorobenzene	541-73-1	0.11 U	0.11	3.8		0.86
06192	1,4-Dichlorobenzene	106-46-7	0.15 U	0.15	3.8		0.86
06192	Dichlorodifluoromethane	75-71-8	0.11 U	0.11	3.8		0.86
06192	1,1-Dichloroethane	75-34-3	0.09 U	0.09	3.8		0.86
06192	1,2-Dichloroethane	107-06-2	0.14 U	0.14	3.8		0.86
06192	1,1-Dichloroethene	75-35-4	0.37 U	0.37	3.8		0.86
06192	cis-1,2-Dichloroethene	156-59-2	0.18 U	0.18	3.8		0.86
06192	trans-1,2-Dichloroethene	156-60-5	0.11 U	0.11	3.8		0.86
06192	1,2-Dichloropropane	78-87-5	0.16 U	0.16	3.8		0.86
06192	1,3-Dichloropropane	142-28-9	0.07 U	0.07	3.8		0.86
06192	2,2-Dichloropropane	594-20-7	0.16 U	0.16	3.8		0.86
06192	1,1-Dichloropropene	563-58-6	0.12 U	0.12	3.8		0.86
06192	cis-1,3-Dichloropropene	10061-01-5	0.15 U	0.15	3.8		0.86
06192	trans-1,3-Dichloropropene	10061-02-6	0.16 U	0.16	3.8		0.86
06192	Ethylbenzene	100-41-4	0.06 U	0.06	3.8		0.86
06192	Freon 113	76-13-1	0.10 U	0.10	3.8		0.86
06192	Freon 133a	75-88-7	0.47 U	0.47	4.7		0.86
06192	Hexachlorobutadiene	87-68-3	0.13 U	0.13	3.8		0.86
06192	2-Hexanone	591-78-6	1.5 U	1.5	7.5		0.86
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	3.8		0.86
06192	p-Isopropyltoluene	99-87-6	0.10 U	0.10	3.8		0.86
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20 U	0.20	3.8		0.86
06192	4-Methyl-2-pentanone	108-10-1	0.37 U	0.37	7.5		0.86
06192	Methylene Chloride	75-09-2	0.82 J	0.23	3.8		0.86
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	3.8		0.86

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.09 U	0.09	3.8		0.86
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.10 U	0.10	3.8		0.86
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22 U	0.22	3.8		0.86
06192	Tetrachloroethene	127-18-4	0.19 U	0.19	3.8		0.86
06192	Toluene	108-88-3	0.07 U	0.07	3.8		0.86
06192	1,2,3-Trichlorobenzene	87-61-6	0.13 U	0.13	3.8		0.86
06192	1,2,4-Trichlorobenzene	120-82-1	0.17 U	0.17	3.8		0.86
06192	1,1,1-Trichloroethane	71-55-6	0.19 U	0.19	3.8		0.86
06192	1,1,2-Trichloroethane	79-00-5	0.25 U	0.25	3.8		0.86
06192	Trichloroethene	79-01-6	0.14 U	0.14	3.8		0.86
06192	Trichlorofluoromethane	75-69-4	0.27 U	0.27	3.8		0.86
06192	1,2,3-Trichloropropane	96-18-4	0.31 U	0.31	3.8		0.86
06192	1,2,4-Trimethylbenzene	95-63-6	0.38 U	0.38	3.8		0.86
06192	1,3,5-Trimethylbenzene	108-67-8	0.09 U	0.09	3.8		0.86
06192	Vinyl Chloride	75-01-4	0.19 U	0.19	3.8		0.86
06192	m+p-Xylene	179601-23-1	0.16 U	0.16	3.8		0.86
06192	o-Xylene	95-47-6	0.16 U	0.16	3.8		0.86
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	4.6 U	4.6	14		21.11
GC/MS	Semivolatiles	EPA 1625C	ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	18.3 U	18.3	36.7		1
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U 0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.72	U 0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.72	U 0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U 0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U 0.72	1.8		1

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Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Benzo(k)fluoranthene	207-08-9	0.72 U	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5 U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5 U	6.5	20		1
10138	Chrysene	218-01-9	0.36 U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5 U	6.5	20		1
10138	Fluoranthene	206-44-0	0.72 U	0.72	1.8		1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72 U	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20		1
10138	Phenanthrene	85-01-8	0.72 U	0.72	1.8		1
10138	Pyrene	129-00-0	0.72 U	0.72	1.8		1
GC	Volatiles	TPH GRO SW-846 8015B mod	mg/kg	mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2 U	0.2	1		22.2
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66 U	66	130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44 U	44	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88 U	88	260	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88 U	88	260	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	44 U	44	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	44 U	44	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	44 U	44	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	330	1000000 0	1
10132	Nitrobenzene	98-95-3	44 U	44	130	1000000 0	1
10132	Nitroglycerin	55-63-0	880 U	880	2,600	1000000 0	1
10132	2-Nitrotoluene	88-72-2	88 U	88	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1

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Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives							
		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Nitrotoluene	99-99-0	88 U	88	130	1000000 0	1
10132	PETN	78-11-5	880 U	880	2,600	1000000 0	1
10132	RDX	121-82-4	55 U	55	130	1000000 0	1
10132	Tetryl	479-45-8	67 U	67	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	44 U	44	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	44 U	44	130	1000000 0	1
HPLC Organics							
		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde	50-00-0	660 U	660	1,700		1
The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Perchlorate							
		SW-846 6850 1/2007	ug/kg	ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3 U	2.3	5.5		1
Pesticides/PCBs							
		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36 U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36 U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36 U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43 U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
GC Miscellaneous							
		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	550		1
10501	Isopropanol	67-63-0	110 U	110	550		1
10501	Methanol	67-56-1	110 U	110	550		1
GC Miscellaneous							
		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.5 U	5.5	11		1
08283	Ethylene glycol	107-21-1	5.5 U	5.5	11		1
08283	Propylene glycol	57-55-6	5.5 U	5.5	11		1

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Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	3.9		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg		mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	0.44	J	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44	U	0.44	1.3		1
Metals		SW-846 6010B	mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	25,600		5.48	21.8		1
07914	Boron	7440-42-8	0.969	U	0.969	5.45		1
01650	Calcium	7440-70-2	4,530		6.68	21.8		1
01654	Iron	7439-89-6	27,300		5.13	21.8		1
01656	Lithium	7439-93-2	27.0		0.24	2.2		1
01657	Magnesium	7439-95-4	5,550		2.77	10.9		1
06958	Manganese	7439-96-5	430		0.0850	0.545		1
10145	Phosphorus	7723-14-0	253		0.610	10.9		1
01662	Potassium	7440-09-7	2,650		19.6	54.5		1
01667	Sodium	7440-23-5	191		40.6	109		1
07968	Strontium	7440-24-6	28.8		0.0675	0.545		1
06969	Tin	7440-31-5	3.00	J	1.09	10.9		1
06970	Titanium	7440-32-6	1,390		0.414	1.09		1
10146	Zirconium	7440-67-7	5.65		0.915	5.45		1
		SW-846 6020	mg/kg		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.370		0.0647	0.216		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.								
06125	Arsenic	7440-38-2	12.3		0.0863	0.431		2
06126	Barium	7440-39-3	176		0.116	0.431		2
06127	Beryllium	7440-41-7	1.14		0.0173	0.108		2
06128	Cadmium	7440-43-9	0.330		0.0431	0.108		2
06131	Chromium	7440-47-3	22.7		0.129	0.431		2
06132	Cobalt	7440-48-4	9.24		0.0216	0.108		2
06133	Copper	7440-50-8	20.1		0.0712	0.431		2
06135	Lead	7439-92-1	15.4		0.0112	0.216		2
06138	Molybdenum	7439-98-7	0.540		0.0539	0.108		2
06139	Nickel	7440-02-0	29.9		0.108	0.431		2
06141	Selenium	7782-49-2	0.0574	J	0.0431	0.431		2
06142	Silver	7440-22-4	0.0750	J	0.0129	0.108		2
06145	Thallium	7440-28-0	0.440		0.0324	0.108		2
06148	Vanadium	7440-62-2	90.3		0.0237	0.108		2

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
06149	Zinc	SW-846 6020 7440-66-6	mg/kg 79.6	mg/kg 0.604	mg/kg 3.24	mg/kg	2
00159	Mercury	SW-846 7471A 7439-97-6	mg/kg 0.0030 U	mg/kg 0.0030	mg/kg 0.103	mg/kg	1
Wet Chemistry							
07332	11a Anions by 300.0 - Fluoride	EPA 300.0 16984-48-8	mg/kg 3.1	mg/kg 0.88	mg/kg 1.1	mg/kg	1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1 J	0.88	1.7		1
10147	7a Perchlorate EPA 314.0	EPA 314.0 14797-73-0	ug/kg 9.9 U	ug/kg 9.9	ug/kg 33.0	ug/kg	1
05892	3a Cr VI by EPA 7199	SW-846 7199 18540-29-9	mg/kg 0.41 J	mg/kg 0.22	mg/kg 1.1	mg/kg	1
05895	17a Cyanide by 9012B	SW-846 9012B 57-12-5	mg/kg 0.19 U	mg/kg 0.19	mg/kg 0.53	mg/kg	1
00394	18a pH by 9045C	SW-846 9045C modified n.a.	Std. Units 7.55	Std. Units 0.0100	Std. Units 0.0100	Std. Units	1
11624	Moisture Content by 160.3	EPA 160.3 modified n.a.	% 9.1	% 0.50	% 0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-089-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 16:55	Chelsea B Eastep	0.86
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:17	Sara E Johnson	21.11
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:56	Lois E Hiltz	n.a.

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Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
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S0894 SDG#: DE159-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 15:54	Lois E Hiltz	n.a.
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 20:05	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 07:49	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 18:04	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11151B34A	05/31/2011 17:01	Elizabeth J Marin	22.2
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:53	Lois E Hiltz	n.a.
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 21:28	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 08:44	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/06/2011 21:40	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:18	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:13	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:24	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 07:22	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111570011A	06/07/2011 22:48	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	111570011A	06/06/2011 18:30	Sally L Appleyard	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0894 SDG#: DE159-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:24	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:24	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:40	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:30	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 19:30	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 16:19	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 14:56	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:33	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 10 of 10

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

REVISÉ
LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0894 SDG#: DE159-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 1 of 8

REVISED

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.7	7.0	8.3		0.94
06192	Benzene	71-43-2	0.10 U	0.10	4.2		0.94
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.2		0.94
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.2		0.94
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.2		0.94
06192	Bromoform	75-25-2	0.42 U	0.42	4.2		0.94
06192	Bromomethane	74-83-9	0.26 U	0.26	4.2		0.94
06192	2-Butanone	78-93-3	1.3 U	1.3	8.3		0.94
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.2		0.94
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.2		0.94
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.2		0.94
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.2		0.94
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.2		0.94
06192	Chloroethane	75-00-3	0.14 U	0.14	4.2		0.94
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.2		0.94
06192	Chloroform	67-66-3	0.12 U	0.12	4.2		0.94
06192	Chloromethane	74-87-3	0.34 U	0.34	4.2		0.94
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.2		0.94
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.2		0.94
06192	Chlorotrifluoroethene	79-38-9	0.52 U	0.52	5.2		0.94
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73 U	0.73	4.2		0.94
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.2		0.94
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.2		0.94
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.2		0.94
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.2		0.94
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.2		0.94
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.2		0.94
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.2		0.94
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.2		0.94
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.2		0.94
06192	1,1-Dichloroethene	75-35-4	0.41 U	0.41	4.2		0.94
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.2		0.94
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.2		0.94
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.2		0.94
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.2		0.94
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.2		0.94
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.2		0.94
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.2		0.94
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.2		0.94
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.2		0.94
06192	Freon 113	76-13-1	0.11 U	0.11	4.2		0.94
06192	Freon 133a	75-88-7	0.52 U	0.52	5.2		0.94
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.2		0.94
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.3		0.94
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.2		0.94
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.2		0.94
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.2		0.94
06192	4-Methyl-2-pentanone	108-10-1	0.41 U	0.41	8.3		0.94
06192	Methylene Chloride	75-09-2	0.79 J	0.25	4.2		0.94
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.2		0.94

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.2		0.94
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.2		0.94
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.2		0.94
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.2		0.94
06192	Toluene	108-88-3	0.08 U	0.08	4.2		0.94
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.2		0.94
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.2		0.94
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.2		0.94
06192	1,1,2-Trichloroethane	79-00-5	0.28 U	0.28	4.2		0.94
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.2		0.94
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.2		0.94
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.2		0.94
06192	1,2,4-Trimethylbenzene	95-63-6	0.42 U	0.42	4.2		0.94
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.2		0.94
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.2		0.94
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.2		0.94
06192	o-Xylene	95-47-6	0.18 U	0.18	4.2		0.94
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.3 U	5.3	16		23.95
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U 0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U 0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U 0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.72	U 0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.72	U 0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U 0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U 0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.72	U 0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U 6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U 6.5	20		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Chrysene	218-01-9	0.36 U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72 U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5 U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5 U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5 U	6.5	20		1
10138	Fluoranthene	206-44-0	0.72 U	0.72	1.8		1
10138	Fluorene	86-73-7	0.72 U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72 U	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72 U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72 U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72 U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72 U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5 U	6.5	20		1
10138	Phenanthrene	85-01-8	0.72 U	0.72	1.8		1
10138	Pyrene	129-00-0	0.72 U	0.72	1.8		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66 U	66	130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44 U	44	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88 U	88	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88 U	88	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	44 U	44	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	44 U	44	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	44 U	44	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	330	1000000 0	1
10132	Nitrobenzene	98-95-3	44 U	44	130	1000000 0	1
10132	Nitroglycerin	55-63-0	880 U	880	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	88 U	88	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	88 U	88	130	1000000 0	1
10132	PETN	78-11-5	880 U	880	2,700	1000000 0	1
10132	RDX	121-82-4	55 U	55	130	1000000 0	1
10132	Tetryl	479-45-8	68 U	68	130	1000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	1,3,5-Trinitrobenzene	99-35-4	44 U	44	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44 U	44	130	10000000	1
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36 U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36 U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36 U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36 U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36 U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36 U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43 U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36 U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36 U	0.36	1.9		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	28,900	5.56	22.1		1
07914	Boron	7440-42-8	1.00 J	0.983	5.52		1
01650	Calcium	7440-70-2	7,380	6.77	22.1		1
01654	Iron	7439-89-6	29,500	10.4	44.2		2
01656	Lithium	7439-93-2	28.1	0.24	2.2		1
01657	Magnesium	7439-95-4	6,630	2.81	11.0		1
06958	Manganese	7439-96-5	407	0.0862	0.552		1
10145	Phosphorus	7723-14-0	313	0.619	11.0		1
01662	Potassium	7440-09-7	3,490	19.9	55.2		1
01667	Sodium	7440-23-5	575	41.2	110		1
07968	Strontium	7440-24-6	39.1	0.0685	0.552		1
06969	Tin	7440-31-5	2.78 J	1.10	11.0		1
06970	Titanium	7440-32-6	1,710	0.420	1.10		1
10146	Zirconium	7440-67-7	6.40	0.928	5.52		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.331	0.0656	0.219		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.31	0.0875	0.438		2
06126	Barium	7440-39-3	217	0.295	1.09		5
06127	Beryllium	7440-41-7	1.04	0.0175	0.109		2
06128	Cadmium	7440-43-9	0.448	0.0438	0.109		2
06131	Chromium	7440-47-3	28.3	0.131	0.438		2
06132	Cobalt	7440-48-4	14.7	0.0219	0.109		2
06133	Copper	7440-50-8	18.2	0.0722	0.438		2
06135	Lead	7439-92-1	14.7	0.0114	0.219		2
06138	Molybdenum	7439-98-7	0.579	0.0547	0.109		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06139	Nickel	7440-02-0	29.5	0.109	0.438		2
06141	Selenium	7782-49-2	0.0438 U	0.0438	0.438		2
06142	Silver	7440-22-4	0.0729 J	0.0131	0.109		2
06145	Thallium	7440-28-0	0.478	0.0328	0.109		2
06148	Vanadium	7440-62-2	93.1	0.0241	0.109		2
06149	Zinc	7440-66-6	86.3	0.613	3.28		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.106		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	20.8	0.88	1.1		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	33.1		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.4	0.22	1.1		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.13	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	9.5	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-081-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 17:17	Chelsea B Eastep	0.94
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:36	Sara E Johnson	23.95

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Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0814 SDG#: DE159-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:03	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH20 Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 16:00	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 08:15	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 18:36	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 22:11	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:37	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:55	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:44	David K Beck	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:42	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:42	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:47	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:47	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:56	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0814 SDG#: DE159-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:45	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 16:41	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:13	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

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Analysis Report

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Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	540		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U 180	540		1
04688	Benzyl alcohol	100-51-6	180	U 180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U 36	180		1
04688	4-Chloroaniline	106-47-8	73	U 73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U 36	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U 36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U 36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	540		1
04688	2,4-Dinitrophenol	51-28-5	360	U 360	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	36	U 36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U 73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	540		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	36	U 36	180		1
04688	4-Methylphenol	106-44-5	36	U 36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	36	U 36	180		1
04688	4-Nitroaniline	100-01-6	73	U 73	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U 180	540		1
04688	Phenol	108-95-2	18	U 18	180		1

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Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U 36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U 36	180		1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:							
2-nitrophenol							
4-bromophenyl-phenylether							
hexachlorobenzene							
hexachlorobutadiene							
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73 U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36 U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36 U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73 U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73 U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	1.1 J	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73 U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73 U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6 U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6 U	6.6	20		1
10138	Chrysene	218-01-9	0.55 J	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73 U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6 U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6 U	6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.6 U	6.6	20		1
10138	Fluoranthene	206-44-0	0.73 U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73 U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73 U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73 U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73 U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73 U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73 U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6 U	6.6	20		1
10138	Phenanthrene	85-01-8	0.73 U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73 U	0.73	1.8		1
Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg		
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	64 U	64	130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	43 U	43	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	86 U	86	260	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	86 U	86	260	1000000 0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*		Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg		ug/kg		ug/kg	ug/kg	
10132	1,3-Dinitrobenzene	99-65-0	43	U	43		130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	43	U	43		130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	43	U	43		130	1000000 0	1
10132	HMX	2691-41-0	110	U	110		320	1000000 0	1
10132	Nitrobenzene	98-95-3	43	U	43		130	1000000 0	1
10132	Nitroglycerin	55-63-0	860	U	860		2,600	1000000 0	1
10132	2-Nitrotoluene	88-72-2	86	U	86		130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110	U	110		130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	86	U	86		130	1000000 0	1
10132	PETN	78-11-5	860	U	860		2,600	1000000 0	1
10132	RDX	121-82-4	54	U	54		130	1000000 0	1
10132	Tetryl	479-45-8	66	U	66		130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	43	U	43		130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	43	U	43		130	1000000 0	1
Pesticides/PCBs		SW-846 8082	ug/kg		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1		3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1		3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1		3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36		1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36		1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36		1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36		1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36		1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36		1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43		1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36		1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36		1.9		1
Metals		SW-846 6010B	mg/kg		mg/kg		mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,100		5.29		21.0		1
07914	Boron	7440-42-8	0.935	U	0.935		5.25		1
01650	Calcium	7440-70-2	7,150		6.44		21.0		1
01654	Iron	7439-89-6	21,500		4.95		21.0		1
01656	Lithium	7439-93-2	25.8		0.23		2.1		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6010B		mg/kg	mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	4,490	2.67	10.5		1
06958	Manganese	7439-96-5	284	0.0820	0.525		1
10145	Phosphorus	7723-14-0	291	0.588	10.5		1
01662	Potassium	7440-09-7	2,320	18.9	52.5		1
01667	Sodium	7440-23-5	341	39.2	105		1
07968	Strontium	7440-24-6	23.0	0.0652	0.525		1
06969	Tin	7440-31-5	2.66 J	1.05	10.5		1
06970	Titanium	7440-32-6	1,230	0.399	1.05		1
10146	Zirconium	7440-67-7	3.95 J	0.883	5.25		1
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.179 J	0.0643	0.214		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.69	0.0857	0.429		2
06126	Barium	7440-39-3	113	0.116	0.429		2
06127	Beryllium	7440-41-7	0.735	0.0171	0.107		2
06128	Cadmium	7440-43-9	0.162	0.0429	0.107		2
06131	Chromium	7440-47-3	18.7	0.129	0.429		2
06132	Cobalt	7440-48-4	6.21	0.0214	0.107		2
06133	Copper	7440-50-8	10.8	0.0707	0.429		2
06135	Lead	7439-92-1	7.15	0.0111	0.214		2
06138	Molybdenum	7439-98-7	0.418	0.0536	0.107		2
06139	Nickel	7440-02-0	17.7	0.107	0.429		2
06141	Selenium	7782-49-2	0.0429 U	0.0429	0.429		2
06142	Silver	7440-22-4	0.0560 J	0.0129	0.107		2
06145	Thallium	7440-28-0	0.337	0.0321	0.107		2
06148	Vanadium	7440-62-2	55.1	0.0236	0.107		2
06149	Zinc	7440-66-6	63.5	0.600	3.21		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0130 J	0.0031	0.109		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.9	0.87	1.1		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8 U	9.8	32.8		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.60	0.0100	0.0100		1

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Analysis Report

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REVISED

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 160.3 modified							
11624	Moisture Content by 160.3	n.a.	8.5	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 08:42	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 19:06	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 22:53	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:55	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:46	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:46	David K Beck	2

*=This limit was used in the evaluation of the final result

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Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0819 SDG#: DE159-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:58	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:59	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 17:25	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 15:19	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

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Analysis Report

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REVISED

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.5	6.9	8.3		0.9
06192	Benzene	71-43-2	0.10 U	0.10	4.1		0.9
06192	Bromobenzene	108-86-1	0.14 U	0.14	4.1		0.9
06192	Bromochloromethane	74-97-5	0.34 U	0.34	4.1		0.9
06192	Bromodichloromethane	75-27-4	0.08 U	0.08	4.1		0.9
06192	Bromoform	75-25-2	0.41 U	0.41	4.1		0.9
06192	Bromomethane	74-83-9	0.26 U	0.26	4.1		0.9
06192	2-Butanone	78-93-3	1.3 U	1.3	8.3		0.9
06192	n-Butylbenzene	104-51-8	0.12 U	0.12	4.1		0.9
06192	sec-Butylbenzene	135-98-8	0.06 U	0.06	4.1		0.9
06192	tert-Butylbenzene	98-06-6	0.17 U	0.17	4.1		0.9
06192	Carbon Tetrachloride	56-23-5	0.15 U	0.15	4.1		0.9
06192	Chlorobenzene	108-90-7	0.11 U	0.11	4.1		0.9
06192	Chloroethane	75-00-3	0.14 U	0.14	4.1		0.9
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31 U	0.31	4.1		0.9
06192	Chloroform	67-66-3	0.12 U	0.12	4.1		0.9
06192	Chloromethane	74-87-3	0.34 U	0.34	4.1		0.9
06192	2-Chlorotoluene	95-49-8	0.15 U	0.15	4.1		0.9
06192	4-Chlorotoluene	106-43-4	0.15 U	0.15	4.1		0.9
06192	Chlorotrifluoroethene	79-38-9	0.52 U	0.52	5.2		0.9
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73 U	0.73	4.1		0.9
06192	Dibromochloromethane	124-48-1	0.21 U	0.21	4.1		0.9
06192	1,2-Dibromoethane	106-93-4	0.18 U	0.18	4.1		0.9
06192	Dibromomethane	74-95-3	0.25 U	0.25	4.1		0.9
06192	1,2-Dichlorobenzene	95-50-1	0.09 U	0.09	4.1		0.9
06192	1,3-Dichlorobenzene	541-73-1	0.12 U	0.12	4.1		0.9
06192	1,4-Dichlorobenzene	106-46-7	0.17 U	0.17	4.1		0.9
06192	Dichlorodifluoromethane	75-71-8	0.12 U	0.12	4.1		0.9
06192	1,1-Dichloroethane	75-34-3	0.10 U	0.10	4.1		0.9
06192	1,2-Dichloroethane	107-06-2	0.16 U	0.16	4.1		0.9
06192	1,1-Dichloroethene	75-35-4	0.40 U	0.40	4.1		0.9
06192	cis-1,2-Dichloroethene	156-59-2	0.20 U	0.20	4.1		0.9
06192	trans-1,2-Dichloroethene	156-60-5	0.12 U	0.12	4.1		0.9
06192	1,2-Dichloropropane	78-87-5	0.18 U	0.18	4.1		0.9
06192	1,3-Dichloropropane	142-28-9	0.08 U	0.08	4.1		0.9
06192	2,2-Dichloropropane	594-20-7	0.18 U	0.18	4.1		0.9
06192	1,1-Dichloropropene	563-58-6	0.14 U	0.14	4.1		0.9
06192	cis-1,3-Dichloropropene	10061-01-5	0.17 U	0.17	4.1		0.9
06192	trans-1,3-Dichloropropene	10061-02-6	0.18 U	0.18	4.1		0.9
06192	Ethylbenzene	100-41-4	0.06 U	0.06	4.1		0.9
06192	Freon 113	76-13-1	0.11 U	0.11	4.1		0.9
06192	Freon 133a	75-88-7	0.52 U	0.52	5.2		0.9
06192	Hexachlorobutadiene	87-68-3	0.15 U	0.15	4.1		0.9
06192	2-Hexanone	591-78-6	1.7 U	1.7	8.3		0.9
06192	Isopropylbenzene	98-82-8	0.06 U	0.06	4.1		0.9
06192	p-Isopropyltoluene	99-87-6	0.11 U	0.11	4.1		0.9
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22 U	0.22	4.1		0.9
06192	4-Methyl-2-pentanone	108-10-1	0.40 U	0.40	8.3		0.9
06192	Methylene Chloride	75-09-2	1.1 J	0.25	4.1		0.9
06192	n-Propylbenzene	103-65-1	0.07 U	0.07	4.1		0.9

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10 U	0.10	4.1		0.9
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11 U	0.11	4.1		0.9
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24 U	0.24	4.1		0.9
06192	Tetrachloroethene	127-18-4	0.21 U	0.21	4.1		0.9
06192	Toluene	108-88-3	0.08 U	0.08	4.1		0.9
06192	1,2,3-Trichlorobenzene	87-61-6	0.15 U	0.15	4.1		0.9
06192	1,2,4-Trichlorobenzene	120-82-1	0.19 U	0.19	4.1		0.9
06192	1,1,1-Trichloroethane	71-55-6	0.21 U	0.21	4.1		0.9
06192	1,1,2-Trichloroethane	79-00-5	0.28 U	0.28	4.1		0.9
06192	Trichloroethene	79-01-6	0.16 U	0.16	4.1		0.9
06192	Trichlorofluoromethane	75-69-4	0.30 U	0.30	4.1		0.9
06192	1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	4.1		0.9
06192	1,2,4-Trimethylbenzene	95-63-6	0.41 U	0.41	4.1		0.9
06192	1,3,5-Trimethylbenzene	108-67-8	0.10 U	0.10	4.1		0.9
06192	Vinyl Chloride	75-01-4	0.21 U	0.21	4.1		0.9
06192	m+p-Xylene	179601-23-1	0.18 U	0.18	4.1		0.9
06192	o-Xylene	95-47-6	0.18 U	0.18	4.1		0.9
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS	Volatiles	SW-846 8260B SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.2 U	5.2	15		22.36
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:							
2-nitrophenol							
4-bromophenyl-phenylether							
hexachlorobenzene							
hexachlorobutadiene							
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U 0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U 0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U 0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U 0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U 0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21		1

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Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C SIM							
10138	Chrysene	218-01-9	0.38 U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9 U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9 U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9 U	6.9	21		1
10138	Fluoranthene	206-44-0	0.76 U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76 U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76 U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76 U	0.76	1.9		1
Perchlorate SW-846 6850 1/2007							
06557	6a Perchlorate EPA 6850	14797-73-0	3.9 J	2.4	5.8		1
Pesticides/PCBs SW-846 8082							
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2 U	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	0.45 U	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
Metals SW-846 6010B							
01643	Aluminum	7429-90-5	30,900	5.58	22.2		1
07914	Boron	7440-42-8	0.988 U	0.988	5.55		1
01650	Calcium	7440-70-2	10,300	6.81	22.2		1
01654	Iron	7439-89-6	31,600	10.5	44.4		2
01656	Lithium	7439-93-2	35.2	0.24	2.2		1
01657	Magnesium	7439-95-4	6,880	2.82	11.1		1
06958	Manganese	7439-96-5	178	0.0866	0.555		1
10145	Phosphorus	7723-14-0	226	0.622	11.1		1
01662	Potassium	7440-09-7	3,230	20.0	55.5		1
01667	Sodium	7440-23-5	714	41.4	111		1
07968	Strontium	7440-24-6	57.5	0.0688	0.555		1
06969	Tin	7440-31-5	3.00 J	1.11	11.1		1
06970	Titanium	7440-32-6	1,290	0.422	1.11		1
10146	Zirconium	7440-67-7	4.75 J	0.933	5.55		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.204 J	0.0679	0.226		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.08	0.0906	0.453		2
06126	Barium	7440-39-3	170	0.122	0.453		2
06127	Beryllium	7440-41-7	1.00	0.0181	0.113		2
06128	Cadmium	7440-43-9	0.490	0.0453	0.113		2
06131	Chromium	7440-47-3	26.8	0.136	0.453		2
06132	Cobalt	7440-48-4	8.52	0.0226	0.113		2
06133	Copper	7440-50-8	16.8	0.0747	0.453		2
06135	Lead	7439-92-1	13.3	0.0118	0.226		2
06138	Molybdenum	7439-98-7	0.224	0.0566	0.113		2
06139	Nickel	7440-02-0	28.7	0.113	0.453		2
06141	Selenium	7782-49-2	0.0453 U	0.0453	0.453		2
06142	Silver	7440-22-4	0.0595 J	0.0136	0.113		2
06145	Thallium	7440-28-0	0.477	0.0340	0.113		2
06148	Vanadium	7440-62-2	77.2	0.0249	0.113		2
06149	Zinc	7440-66-6	76.6	0.634	3.40		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.111		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	13.3	0.92	1.2		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.6		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32 J	0.23	1.2		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.54	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	13.4	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0754 SDG#: DE159-05

General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-075-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 17:40	Chelsea B Eastep	0.9
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:56	Sara E Johnson	22.36
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:09	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 16:06	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 09:08	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 19:38	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 21:59	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:13	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:59	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

S0754 SDG#: DE159-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:48	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:48	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:59	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 20:13	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 17:47	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:36	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	24	J 19	380		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.8	U 3.8	9.4		5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.4		5
10138	Anthracene	120-12-7	1.9	U 1.9	9.4		5
10138	Benzo(a)anthracene	56-55-3	3.8	U 3.8	9.4		5
10138	Benzo(a)pyrene	50-32-8	3.8	U 3.8	9.4		5
10138	Benzo(b)fluoranthene	205-99-2	4.2	J 3.8	9.4		5
10138	Benzo(g,h,i)perylene	191-24-2	3.8	U 3.8	9.4		5
10138	Benzo(k)fluoranthene	207-08-9	3.8	U 3.8	9.4		5
10138	Chrysene	218-01-9	3.4	J 1.9	9.4		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U 3.8	9.4		5
10138	Fluoranthene	206-44-0	5.0	J 3.8	9.4		5
10138	Fluorene	86-73-7	3.8	U 3.8	9.4		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U 3.8	9.4		5
10138	1-Methylnaphthalene	90-12-0	3.8	U 3.8	9.4		5
10138	2-Methylnaphthalene	91-57-6	3.8	U 3.8	9.4		5
10138	Naphthalene	91-20-3	7.6	J 3.8	9.4		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U 3.8	9.4		5
10138	Phenanthrene	85-01-8	8.6	J 3.8	9.4		5
10138	Pyrene	129-00-0	3.8	U 3.8	9.4		5
	Reporting limits were raised due to interference from the sample matrix.						
Perchlorate	SW-846 6850 1/2007	ug/kg	ug/kg	ug/kg	ug/kg		
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U 2.4	5.8		1
Pesticides/PCBs	SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg		
10225	Aroclor 5432	63496-31-1	1.1	U 1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U 1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U 1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U 0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U 0.38	1.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.45 U	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,500	5.67	22.6		1
07914	Boron	7440-42-8	1.00 U	1.00	5.64		1
01650	Calcium	7440-70-2	42,600	6.92	22.6		1
01654	Iron	7439-89-6	19,700	5.31	22.6		1
01656	Lithium	7439-93-2	22.4	0.25	2.3		1
01657	Magnesium	7439-95-4	4,760	2.87	11.3		1
06958	Manganese	7439-96-5	301	0.0880	0.564		1
10145	Phosphorus	7723-14-0	387	0.632	11.3		1
01662	Potassium	7440-09-7	2,500	20.3	56.4		1
01667	Sodium	7440-23-5	393	42.1	113		1
07968	Strontium	7440-24-6	78.8	0.0699	0.564		1
06969	Tin	7440-31-5	2.78 J	1.13	11.3		1
06970	Titanium	7440-32-6	1,230	0.429	1.13		1
10146	Zirconium	7440-67-7	4.70 J	0.948	5.64		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.194 J	0.0664	0.221		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.16	0.0885	0.443		2
06126	Barium	7440-39-3	125	0.120	0.443		2
06127	Beryllium	7440-41-7	0.645	0.0177	0.111		2
06128	Cadmium	7440-43-9	0.484	0.0443	0.111		2
06131	Chromium	7440-47-3	20.7	0.133	0.443		2
06132	Cobalt	7440-48-4	8.19	0.0221	0.111		2
06133	Copper	7440-50-8	13.2	0.0730	0.443		2
06135	Lead	7439-92-1	8.38	0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.782	0.0553	0.111		2
06139	Nickel	7440-02-0	24.4	0.111	0.443		2
06141	Selenium	7782-49-2	0.0459 J	0.0443	0.443		2
06142	Silver	7440-22-4	0.0669 J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.379	0.0332	0.111		2
06148	Vanadium	7440-62-2	59.4	0.0243	0.111		2
06149	Zinc	7440-66-6	62.8	0.620	3.32		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.112		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 300.0							
07332	11a Anions by 300.0 - Fluoride	16984-48-8	6.3	0.92	1.2	mg/kg	1
EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.5	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.36 J	0.23	1.2	mg/kg	1
SW-846 9045C modified							
00394	18a pH by 9045C	n.a.	8.91	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	Moisture Content by 160.3	n.a.	13.1	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 09:35	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 09:52	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:05	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:32	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

S0759 SDG#: DE159-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:49	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:49	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:00	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 20:56	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 18:09	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:47	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: TB-052311 Water
SSFL Area IV Collocated Soil Sampling
TB-052311

LLI Sample # WW 6296041
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

TB523 SDG#: DE159-07TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6 U	6	20		1
10904	Benzene	71-43-2	0.5 U	0.5	5		1
10904	Bromobenzene	108-86-1	1 U	1	5		1
10904	Bromochloromethane	74-97-5	1 U	1	5		1
10904	Bromodichloromethane	75-27-4	1 U	1	5		1
10904	Bromoform	75-25-2	1 U	1	5		1
10904	Bromomethane	74-83-9	1 U	1	5		1
10904	2-Butanone	78-93-3	3 U	3	10		1
10904	n-Butylbenzene	104-51-8	1 U	1	5		1
10904	sec-Butylbenzene	135-98-8	1 U	1	5		1
10904	tert-Butylbenzene	98-06-6	1 U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1 U	1	5		1
10904	Chlorobenzene	108-90-7	0.8 U	0.8	5		1
10904	Chloroethane	75-00-3	1 U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2 U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10904	Chloroform	67-66-3	0.8 U	0.8	5		1
10904	Chloromethane	74-87-3	1 U	1	5		1
10904	2-Chlorotoluene	95-49-8	1 U	1	5		1
10904	4-Chlorotoluene	106-43-4	1 U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2 U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2 U	2	5		1
10904	Dibromochloromethane	124-48-1	1 U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1 U	1	5		1
10904	Dibromomethane	74-95-3	1 U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2 U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1 U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1 U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8 U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8 U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8 U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1 U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1 U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1 U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1 U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1 U	1	5		1
10904	Ethylbenzene	100-41-4	0.8 U	0.8	5		1
10904	Freon 113	76-13-1	2 U	2	10		1
10904	Freon 133a	75-88-7	2 U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2 U	2	5		1
10904	2-Hexanone	591-78-6	3 U	3	10		1
10904	Isopropylbenzene	98-82-8	1 U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1 U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3 U	3	10		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: TB-052311 Water
SSFL Area IV Collocated Soil Sampling
TB-052311

LLI Sample # WW 6296041
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

TB523 SDG#: DE159-07TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2 U	2	5		1
10904	n-Propylbenzene	103-65-1	1 U	1	5		1
10904	Styrene	100-42-5	1 U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8 U	0.8	5		1
10904	Toluene	108-88-3	0.7 U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1 U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8 U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8 U	0.8	5		1
10904	Trichloroethene	79-01-6	1 U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2 U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1 U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5		1
10904	Vinyl Chloride	75-01-4	1 U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8 U	0.8	5		1
10904	o-Xylene	95-47-6	0.8 U	0.8	5		1
GC/MS	Volatiles	SW-846 8260B SIM	ug/l	ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5 U	0.5	2.0		1
GC	Volatiles	TPH GRO SW-8015B	ug/l	ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20 U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	L111471AA	05/27/2011 21:44	Kevin A Sposito	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111461AA	05/26/2011 12:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E111461AA	05/26/2011 12:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L111471AA	05/27/2011 21:44	Kevin A Sposito	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	11151A20A	05/31/2011 15:27	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A20A	05/31/2011 15:27	Laura M Krieger	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	189 U	189	378		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	76	U 76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-94-1	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	380		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U 76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	76	U 76	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.4	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.4	5
10138	Anthracene	120-12-7	1.9	U 1.9	9.4	5
10138	Benzo(a)anthracene	56-55-3	7.0	J 3.7	9.4	5
10138	Benzo(a)pyrene	50-32-8	9.4	3.7	9.4	5
10138	Benzo(b)fluoranthene	205-99-2	25	3.7	9.4	5
10138	Benzo(g,h,i)perylene	191-24-2	6.2	J 3.7	9.4	5
10138	Benzo(k)fluoranthene	207-08-9	3.7	U 3.7	9.4	5
10138	Chrysene	218-01-9	9.6	1.9	9.4	5
10138	Dibenz(a,h)anthracene	53-70-3	3.7	U 3.7	9.4	5
10138	Fluoranthene	206-44-0	11	3.7	9.4	5
10138	Fluorene	86-73-7	3.7	U 3.7	9.4	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	5.0	J 3.7	9.4	5
10138	1-Methylnaphthalene	90-12-0	3.7	U 3.7	9.4	5
10138	2-Methylnaphthalene	91-57-6	3.7	U 3.7	9.4	5
10138	Naphthalene	91-20-3	4.2	J 3.7	9.4	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.4	5
10138	Phenanthrene	85-01-8	6.5	J 3.7	9.4	5
10138	Pyrene	129-00-0	10	3.7	9.4	5

Reporting limits were raised due to interference from the sample matrix.

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U 67	130
					1000000 0
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U 45	130
					1000000 0

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	89 U	89	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	89 U	89	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	330	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	130	1000000 0	1
10132	Nitroglycerin	55-63-0	890 U	890	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	89 U	89	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	89 U	89	130	1000000 0	1
10132	PETN	78-11-5	890 U	890	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	130	1000000 0	1
10132	Tetryl	479-45-8	68 U	68	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	130	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.1		1
10401	Dalapon	75-99-0	5.0 U	5.0	10		1
10401	2,4-DB	94-82-6	0.70 U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45 U	0.45	1.4		1
10401	Dinoseb	88-85-7	0.91 U	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91 U	0.91	1.9		1
10401	MCPA	94-74-6	86 U	86	280		1
10401	MCPP (Mecoprop)	93-65-2	85 U	85	280		1
10401	2,4,5-T	93-76-5	0.093 U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085 U	0.085	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

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SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics SW-846 8315A							
04173	25a Formaldehyde 8315A	50-00-0	680 U	680	1,700	ug/kg	1
The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Perchlorate SW-846 6850 1/2007							
06557	6a Perchlorate EPA 6850	14797-73-0	2.4 U	2.4	5.7	ug/kg	1
Pesticides/PCBs SW-846 8081A							
01363	Aldrin	309-00-2	0.075 U	0.075	0.19	ug/kg	1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19	ug/kg	1
01363	Beta BHC	319-85-7	0.95	0.068	0.19	ug/kg	1
01363	Gamma BHC - Lindane	58-89-9	0.084 U	0.084	0.19	ug/kg	1
01363	Chlordane	57-74-9	0.91 U	0.91	3.9	ug/kg	1
01363	p,p-DDD	72-54-8	0.075 U	0.075	0.39	ug/kg	1
01363	p,p-DDE	72-55-9	0.38 U	0.38	0.39	ug/kg	1
01363	p,p-DDT	50-29-3	1.4	0.075	0.39	ug/kg	1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19	ug/kg	1
01363	Dieldrin	60-57-1	0.075 U	0.075	0.39	ug/kg	1
01363	Endosulfan I	959-98-8	0.11 U	0.11	0.19	ug/kg	1
01363	Endosulfan II	33213-65-9	0.075 U	0.075	0.39	ug/kg	1
01363	Endosulfan Sulfate	1031-07-8	0.075 U	0.075	0.39	ug/kg	1
01363	Endrin	72-20-8	0.075 U	0.075	0.39	ug/kg	1
01363	Endrin Aldehyde	7421-93-4	0.28 U	0.28	0.39	ug/kg	1
01363	Endrin Ketone	53494-70-5	0.075 U	0.075	0.39	ug/kg	1
01363	Heptachlor	76-44-8	0.068 U	0.068	0.19	ug/kg	1
01363	Heptachlor Epoxide	1024-57-3	0.11 U	0.11	0.19	ug/kg	1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9	ug/kg	1
01363	Mirex	2385-85-5	0.11 U	0.11	0.39	ug/kg	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.5	ug/kg	1
The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.							
Reporting limits were raised due to interference from the sample matrix.							
The concentration of beta-BHC detected in the reextract is .06 ug/kg. The concentration of DDT detected in the reextract is .18 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.							
Pesticides/PCBs SW-846 8082							
10225	Aroclor 5432	63496-31-1	11 U	11	38	ug/kg	10

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SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
REVISED
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5442	12642-23-8	11 U	11	38		10
10225	Aroclor 5460	11126-42-4	11 U	11	38		10
10225	PCB-1016	12674-11-2	3.8 U	3.8	19		10
10225	PCB-1221	11104-28-2	3.8 U	3.8	19		10
10225	PCB-1232	11141-16-5	3.8 U	3.8	19		10
10225	PCB-1242	53469-21-9	3.8 U	3.8	19		10
10225	PCB-1248	12672-29-6	3.8 U	3.8	19		10
10225	PCB-1254	11097-69-1	3.8 U	3.8	19		10
10225	PCB-1260	11096-82-5	55	4.4	19		10
10225	PCB-1262	37324-23-5	3.8 U	3.8	19		10
10225	PCB-1268	11100-14-4	3.8 U	3.8	19		10
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	570		1
10501	Isopropanol	67-63-0	110 U	110	570		1
10501	Methanol	67-56-1	110 U	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7 U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7 U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7 U	5.7	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.0		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	2.3 U	2.3	6.8		5
10199	EFH (C15-C20)	n.a.	14	2.3	6.8		5
10199	EFH (C21-C30)	n.a.	39	2.3	6.8		5
10199	EFH (C30 - C40)	n.a.	180	2.3	6.8		5
10199	EFH (C8-C11)	n.a.	2.3 U	2.3	6.8		5
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	35,000	5.67	22.5		1
07914	Boron	7440-42-8	2.11 J	1.00	5.63		1
01650	Calcium	7440-70-2	11,500	6.90	22.5		1
01654	Iron	7439-89-6	33,800	10.6	45.1		2
01656	Lithium	7439-93-2	29.7	0.25	2.3		1
01657	Magnesium	7439-95-4	7,710	2.86	11.3		1
06958	Manganese	7439-96-5	396	0.0879	0.563		1
10145	Phosphorus	7723-14-0	332	0.631	11.3		1
01662	Potassium	7440-09-7	4,580	20.3	56.3		1

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SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
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Account # 13013

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Collected: 05/23/2011 12:10

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Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01667	Sodium	7440-23-5	123	42.0	113		1
07968	Strontium	7440-24-6	45.3	0.0698	0.563		1
06969	Tin	7440-31-5	3.06 J	1.13	11.3		1
06970	Titanium	7440-32-6	1,700	0.428	1.13		1
10146	Zirconium	7440-67-7	7.37	0.946	5.63		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.435	0.0663	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.24	0.0884	0.442		2
06126	Barium	7440-39-3	163	0.298	1.10		5
06127	Beryllium	7440-41-7	1.14	0.0177	0.110		2
06128	Cadmium	7440-43-9	0.421	0.0442	0.110		2
06131	Chromium	7440-47-3	29.7	0.133	0.442		2
06132	Cobalt	7440-48-4	11.2	0.0221	0.110		2
06133	Copper	7440-50-8	23.0	0.0729	0.442		2
06135	Lead	7439-92-1	17.9	0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.702	0.0552	0.110		2
06139	Nickel	7440-02-0	31.2	0.110	0.442		2
06141	Selenium	7782-49-2	0.148 J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0755 J	0.0133	0.110		2
06145	Thallium	7440-28-0	0.503	0.0331	0.110		2
06148	Vanadium	7440-62-2	100	0.0243	0.110		2
06149	Zinc	7440-66-6	106	0.619	3.31		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0458 J	0.0031	0.109		1
Wet Chemistry							
		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2	0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.91 U	0.91	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2 U	10.2	34.1		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.93 J	0.23	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.54		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.10	0.0100	0.0100		1

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14420 Albemarle Point Place

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Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		EPA 160.3 modified		%	%	%	
11624	Moisture Content by 160.3	n.a.	12.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 16:38	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 15:11	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 10:23	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 23:36	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 08:53	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 10:14	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:11	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 05:47	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:50	Richard A Shober	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:28	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:36	Dustin A Underkoffler	1

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Analysis Report

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Page 8 of 9

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

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SL015 SDG#: DE159-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 16:22	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel modified	SW-846 8015B modified	1	111480002A	06/01/2011 18:33	Heather E Williams	5
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:27	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:22	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:26	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:26	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:41	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:10	Ashley M Adams	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL015 SDG#: DE159-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:10	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/07/2011 14:55	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 16:10	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:34	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	56.2	18.8	37.5		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Anthracene	120-12-7	54	J 19	190		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzo(a)anthracene	56-55-3	380	19	190		1
04688	Benzo(a)pyrene	50-32-8	280	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	420	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	110	J 19	190		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	20	J 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190		1
04688	4-Chloroaniline	106-47-8	75	U 75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190		1
04688	Chrysene	218-01-9	380	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	32	J 19	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	370		1
04688	Fluoranthene	206-44-0	470	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	130	J 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Methylphenol	95-48-7	37	U 37	190		1
04688	4-Methylphenol	106-44-5	37	U 37	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	37	U 37	190		1
04688	4-Nitroaniline	100-01-6	75	U 75	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenanthrene	85-01-8	60	J 19	190		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	Pyrene	129-00-0	640	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.3	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.3	5
10138	Benzo(k)fluoranthene	207-08-9	14	3.7	9.3	5
10138	Fluorene	86-73-7	3.7	U 3.7	9.3	5
10138	1-Methylnaphthalene	90-12-0	3.7	U 3.7	9.3	5
10138	2-Methylnaphthalene	91-57-6	3.7	U 3.7	9.3	5
10138	Naphthalene	91-20-3	3.7	U 3.7	9.3	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.3	5

Reporting limits were raised due to interference from the sample matrix.

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67 U	67	130	1000000 0	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45 U	45	130	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90 U	90	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90 U	90	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	130	1000000 0	1
10132	Nitroglycerin	55-63-0	900 U	900	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	90 U	90	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	90 U	90	130	1000000 0	1
10132	PETN	78-11-5	900 U	900	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	130	1000000 0	1
10132	Tetryl	479-45-8	69 U	69	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	130	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3 U	1.3	4.0		1
10401	Dalapon	75-99-0	4.9 U	4.9	10		1
10401	2,4-DB	94-82-6	0.69 U	0.69	1.9		1
10401	Dicamba	1918-00-9	0.45 U	0.45	1.3		1
10401	Dinoseb	88-85-7	0.89 U	0.89	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89 U	0.89	1.9		1
10401	MCPA	94-74-6	85 U	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84 U	84	280		1
10401	2,4,5-T	93-76-5	0.092 U	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.085 J	0.084	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.

Submitted: 05/24/2011 09:40

14420 Albemarle Point Place

Reported: 11/04/2011 11:53

Suite 210

Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	670 U	670	1,700		1
The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.074 U	0.074	0.19		1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.19		1
01363	Beta BHC	319-85-7	0.33	0.067	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.056 J	0.038	0.19		1
01363	Chlordane	57-74-9	2.3 J	0.90	3.8		1
01363	p,p-DDD	72-54-8	0.074 U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.37 U	0.37	0.38		1
01363	p,p-DDT	50-29-3	7.0	0.74	3.8		10
01363	Delta BHC	319-86-8	0.040 U	0.040	0.19		1
01363	Dieldrin	60-57-1	1.6 U	1.6	1.6		1
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.19		1
01363	Endosulfan II	33213-65-9	0.074 U	0.074	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074 U	0.074	0.38		1
01363	Endrin	72-20-8	0.074 U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074 U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.16 U	0.16	0.38		1
01363	Heptachlor	76-44-8	0.067 U	0.067	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.19 U	0.19	0.19		1
01363	Methoxychlor	72-43-5	0.75 U	0.75	1.9		1
01363	Mirex	2385-85-5	0.074 U	0.074	0.38		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.4		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of beta-BHC detected in the reextract is .06 ug/kg. The concentration of DDT detected in the reextract is 2.5 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	11 U	11	37	10

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5442	12642-23-8	11 U	11	37		10
10225	Aroclor 5460	11126-42-4	11 U	11	37		10
10225	PCB-1016	12674-11-2	3.7 U	3.7	19		10
10225	PCB-1221	11104-28-2	3.7 U	3.7	19		10
10225	PCB-1232	11141-16-5	3.7 U	3.7	19		10
10225	PCB-1242	53469-21-9	3.7 U	3.7	19		10
10225	PCB-1248	12672-29-6	3.7 U	3.7	19		10
10225	PCB-1254	11097-69-1	3.7 U	3.7	19		10
10225	PCB-1260	11096-82-5	140	4.4	19		10
10225	PCB-1262	37324-23-5	3.7 U	3.7	19		10
10225	PCB-1268	11100-14-4	3.7 U	3.7	19		10
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	560		1
10501	Isopropanol	67-63-0	110 U	110	560		1
10501	Methanol	67-56-1	110 U	110	560		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.6 U	5.6	11		1
08283	Ethylene glycol	107-21-1	5.6 U	5.6	11		1
08283	Propylene glycol	57-55-6	5.6 U	5.6	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	5.3	1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.9 J	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	3.9		1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	4.5 U	4.5	13		10
10199	EFH (C15-C20)	n.a.	8.2 J	4.5	13		10
10199	EFH (C21-C30)	n.a.	95	4.5	13		10
10199	EFH (C30 - C40)	n.a.	450	4.5	13		10
10199	EFH (C8-C11)	n.a.	4.5 U	4.5	13		10
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	30,400	5.60	22.3		1
07914	Boron	7440-42-8	0.991 U	0.991	5.57		1
01650	Calcium	7440-70-2	12,200	6.83	22.3		1
01654	Iron	7439-89-6	30,900	10.5	44.5		2
01656	Lithium	7439-93-2	26.4	0.25	2.2		1
01657	Magnesium	7439-95-4	7,030	2.83	11.1		1
06958	Manganese	7439-96-5	382	0.0869	0.557		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
10145	Phosphorus	7723-14-0	389	0.624	11.1		1
01662	Potassium	7440-09-7	4,340	20.0	55.7		1
01667	Sodium	7440-23-5	129	41.5	111		1
07968	Strontium	7440-24-6	45.1	0.0691	0.557		1
06969	Tin	7440-31-5	2.88 J	1.11	11.1		1
06970	Titanium	7440-32-6	1,530	0.423	1.11		1
10146	Zirconium	7440-67-7	6.61	0.936	5.57		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.300	0.0662	0.221		2
		Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.					
06125	Arsenic	7440-38-2	6.68	0.0882	0.441		2
06126	Barium	7440-39-3	159	0.119	0.441		2
06127	Beryllium	7440-41-7	0.833	0.0176	0.110		2
06128	Cadmium	7440-43-9	0.318	0.0441	0.110		2
06131	Chromium	7440-47-3	28.9	0.132	0.441		2
06132	Cobalt	7440-48-4	10.3	0.0221	0.110		2
06133	Copper	7440-50-8	17.6	0.0728	0.441		2
06135	Lead	7439-92-1	12.7	0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.509	0.0551	0.110		2
06139	Nickel	7440-02-0	21.8	0.110	0.441		2
06141	Selenium	7782-49-2	0.114 J	0.0441	0.441		2
06142	Silver	7440-22-4	0.0617 J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.358	0.0331	0.110		2
06148	Vanadium	7440-62-2	74.2	0.0243	0.110		2
06149	Zinc	7440-66-6	88.4	0.618	3.31		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.111		1
Wet Chemistry		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.9	0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.3 J	0.90	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.7		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.70 J	0.22	1.1		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.19 U	0.19	0.54		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.24	0.0100	0.0100		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	11.1	0.50	0.50		1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011	20:39	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011	15:38	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011	11:01	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011	14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011	09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011	09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011	00:18	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011	09:03	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011	10:41	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011	06:28	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011	06:41	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011	07:23	Richard A Shober	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011	10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011	15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011	22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011	15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011	16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011	21:43	Tyler O Griffin	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL016 SDG#: DE159-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:49	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 17:07	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:58	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:31	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:29	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:28	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:28	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:29	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:29	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:42	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL016 SDG#: DE159-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:24	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 18:54	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 16:22	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:35	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U 180	550		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzo(a)anthracene	56-55-3	130	J 18	180		1
04688	Benzo(a)pyrene	50-32-8	100	J 18	180		1
04688	Benzo(b)fluoranthene	205-99-2	180	J 18	180		1
04688	Benzo(g,h,i)perylene	191-24-2	41	J 18	180		1
04688	Benzoic acid	65-85-0	180	U 180	550		1
04688	Benzyl alcohol	100-51-6	180	U 180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U 18	180		1
04688	Butylbenzylphthalate	85-68-7	28	J 18	180		1
04688	Di-n-butylphthalate	84-74-2	18	U 18	180		1
04688	Carbazole	86-74-8	18	U 18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	180		1
04688	4-Chloroaniline	106-47-8	74	U 74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U 18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U 18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U 18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U 18	180		1
04688	2-Chlorophenol	95-57-8	18	U 18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	180		1
04688	Chrysene	218-01-9	100	J 18	180		1
04688	Dibenz(a,h)anthracene	53-70-3	22	J 18	180		1
04688	Dibenzofuran	132-64-9	18	U 18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U 18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U 18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U 18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U 18	180		1
04688	Diethylphthalate	84-66-2	18	U 18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	180		1
04688	Dimethylphthalate	131-11-3	18	U 18	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U 180	550		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U 18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U 18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	37	J 18	370		1
04688	Fluoranthene	206-44-0	120	J 18	180		1
04688	Hexachlorobenzene	118-74-1	18	U 18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U 74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U 180	550		1
04688	Hexachloroethane	67-72-1	18	U 18	180		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	53	J 18	180		1
04688	Isophorone	78-59-1	18	U 18	180		1
04688	2-Methylphenol	95-48-7	37	U 37	180		1
04688	4-Methylphenol	106-44-5	37	U 37	180		1

3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Nitroaniline	88-74-4	18	U 18	180		1
04688	3-Nitroaniline	99-09-2	37	U 37	180		1
04688	4-Nitroaniline	100-01-6	74	U 74	180		1
04688	Nitrobenzene	98-95-3	18	U 18	180		1
04688	2-Nitrophenol	88-75-5	18	U 18	180		1
04688	4-Nitrophenol	100-02-7	180	U 180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U 18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U 18	180		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	18	U 18	180		1
04688	Pentachlorophenol	87-86-5	180	U 180	550		1
04688	Phenol	108-95-2	18	U 18	180		1
04688	Pyrene	129-00-0	170	J 18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U 18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	180		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.3	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.3	5
10138	Anthracene	120-12-7	2.2	J 1.9	9.3	5
10138	Benzo(k)fluoranthene	207-08-9	18	3.7	9.3	5
10138	Fluorene	86-73-7	3.7	U 3.7	9.3	5
10138	1-Methylnaphthalene	90-12-0	3.7	U 3.7	9.3	5
10138	2-Methylnaphthalene	91-57-6	3.7	U 3.7	9.3	5
10138	Naphthalene	91-20-3	3.7	U 3.7	9.3	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.3	5
10138	Phenanthrene	85-01-8	5.9	J 3.7	9.3	5

Reporting limits were raised due to interference from the sample matrix.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	4.0
10401	Dalapon	75-99-0	4.9	U 4.9	10
10401	2,4-DB	94-82-6	0.69	U 0.69	1.9
10401	Dicamba	1918-00-9	0.45	U 0.45	1.3

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	Dinoseb	88-85-7	0.89 U	0.89	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89 U	0.89	1.9		1
10401	MCPA	94-74-6	97 J	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84 U	84	280		1
10401	2,4,5-T	93-76-5	0.22	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.18 J	0.084	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.074 U	0.074	0.18		1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.18		1
01363	Beta BHC	319-85-7	0.067 U	0.067	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.18		1
01363	Chlordane	57-74-9	0.89 U	0.89	3.8		1
01363	p,p-DDD	72-54-8	0.074 U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.49 U	0.49	0.49		1
01363	p,p-DDT	50-29-3	12	0.74	3.8		10
01363	Delta BHC	319-86-8	0.040 U	0.040	0.18		1
01363	Dieldrin	60-57-1	2.2 U	2.2	3.8		10
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.18		1
01363	Endosulfan II	33213-65-9	0.074 U	0.074	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074 U	0.074	0.38		1
01363	Endrin	72-20-8	0.074 U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074 U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.074 U	0.074	0.38		1
01363	Heptachlor	76-44-8	0.067 U	0.067	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.28 U	0.28	0.28		1
01363	Methoxychlor	72-43-5	1.1 U	1.1	1.8		1
01363	Mirex	2385-85-5	0.48 U	0.48	0.48		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.4		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of DDT detected in the reextract is 7.0 ug/kg.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	5.6 U	5.6	18		5
10225	Aroclor 5442	12642-23-8	5.6 U	5.6	18		5
10225	Aroclor 5460	11126-42-4	5.6 U	5.6	18		5
10225	PCB-1016	12674-11-2	1.8 U	1.8	9.5		5
10225	PCB-1221	11104-28-2	1.8 U	1.8	9.5		5
10225	PCB-1232	11141-16-5	1.8 U	1.8	9.5		5
10225	PCB-1242	53469-21-9	1.8 U	1.8	9.5		5
10225	PCB-1248	12672-29-6	1.8 U	1.8	9.5		5
10225	PCB-1254	11097-69-1	1.8 U	1.8	9.5		5
10225	PCB-1260	11096-82-5	32	2.2	9.5		5
10225	PCB-1262	37324-23-5	1.8 U	1.8	9.5		5
10225	PCB-1268	11100-14-4	1.8 U	1.8	9.5		5
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	29,000	5.58	22.2		1
07914	Boron	7440-42-8	0.987 U	0.987	5.54		1
01650	Calcium	7440-70-2	12,200	6.80	22.2		1
01654	Iron	7439-89-6	32,400	10.4	44.3		2
01656	Lithium	7439-93-2	25.5	0.24	2.2		1
01657	Magnesium	7439-95-4	6,910	2.82	11.1		1
06958	Manganese	7439-96-5	393	0.0865	0.554		1
10145	Phosphorus	7723-14-0	454	0.621	11.1		1
01662	Potassium	7440-09-7	4,510	20.0	55.4		1
01667	Sodium	7440-23-5	129	41.4	111		1
07968	Strontium	7440-24-6	45.2	0.0687	0.554		1
06969	Tin	7440-31-5	2.96 J	1.11	11.1		1
06970	Titanium	7440-32-6	1,500	0.421	1.11		1
10146	Zirconium	7440-67-7	5.80	0.931	5.54		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.365	0.0652	0.217		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.77	0.0870	0.435		2
06126	Barium	7440-39-3	140	0.117	0.435		2
06127	Beryllium	7440-41-7	0.880	0.0174	0.109		2
06128	Cadmium	7440-43-9	0.391	0.0435	0.109		2
06131	Chromium	7440-47-3	25.4	0.130	0.435		2
06132	Cobalt	7440-48-4	9.01	0.0217	0.109		2
06133	Copper	7440-50-8	24.4	0.0718	0.435		2
06135	Lead	7439-92-1	17.4	0.0113	0.217		2
06138	Molybdenum	7439-98-7	0.929	0.0544	0.109		2
06139	Nickel	7440-02-0	25.5	0.109	0.435		2
06141	Selenium	7782-49-2	0.116 J	0.0435	0.435		2
06142	Silver	7440-22-4	0.0786 J	0.0130	0.109		2
06145	Thallium	7440-28-0	0.449	0.0326	0.109		2
06148	Vanadium	7440-62-2	90.3	0.0239	0.109		2
06149	Zinc	7440-66-6	133	0.609	3.26		2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
00159	Mercury	SW-846 7471A 7439-97-6	mg/kg 0.0031 U	mg/kg 0.0031	mg/kg 0.109	mg/kg	1
Wet Chemistry							
07332	11a Anions by 300.0 - Fluoride	EPA 300.0 16984-48-8	mg/kg 2.0	mg/kg 0.90	mg/kg 1.1	mg/kg	1
10147	7a Perchlorate EPA 314.0	EPA 314.0 14797-73-0	ug/kg 10.1 U	ug/kg 10.1	ug/kg 33.6	ug/kg	1
05892	3a Cr VI by EPA 7199	SW-846 7199 18540-29-9	mg/kg 0.38 J	mg/kg 0.22	mg/kg 1.1	mg/kg	1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.10	0.0100	0.0100		1
Wet Chemistry							
11624	Moisture Content by 160.3	EPA 160.3 modified n.a.	% 10.7	% 0.50	% 0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:04	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 11:32	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 11:09	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:07	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:21	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 07:41	Richard A Shober	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL017 SDG#: DE159-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 09:02	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:51	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:51	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:51	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:06	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:01	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:38	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 19:16	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:27	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL017 SDG#: DE159-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 9

REVISED

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	193 U	193	385		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	21	J 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-94-1	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	380		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	580		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.8	U 3.8	9.6	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.6	5
10138	Anthracene	120-12-7	1.9	U 1.9	9.6	5
10138	Benzo(a)anthracene	56-55-3	5.2	J 3.8	9.6	5
10138	Benzo(a)pyrene	50-32-8	6.2	J 3.8	9.6	5
10138	Benzo(b)fluoranthene	205-99-2	12	3.8	9.6	5
10138	Benzo(g,h,i)perylene	191-24-2	4.8	J 3.8	9.6	5
10138	Benzo(k)fluoranthene	207-08-9	4.6	J 3.8	9.6	5
10138	Chrysene	218-01-9	6.8	J 1.9	9.6	5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U 3.8	9.6	5
10138	Fluoranthene	206-44-0	11	3.8	9.6	5
10138	Fluorene	86-73-7	3.8	U 3.8	9.6	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U 3.8	9.6	5
10138	1-Methylnaphthalene	90-12-0	3.8	U 3.8	9.6	5
10138	2-Methylnaphthalene	91-57-6	3.8	U 3.8	9.6	5
10138	Naphthalene	91-20-3	3.8	U 3.8	9.6	5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U 3.8	9.6	5
10138	Phenanthrene	85-01-8	7.2	J 3.8	9.6	5
10138	Pyrene	129-00-0	8.4	J 3.8	9.6	5

Reporting limits were raised due to interference from the sample matrix.

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U 67	130
					1000000 0
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U 45	130
					1000000 0

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	89 U	89	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	89 U	89	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	330	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	130	1000000 0	1
10132	Nitroglycerin	55-63-0	890 U	890	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	89 U	89	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	89 U	89	130	1000000 0	1
10132	PETN	78-11-5	890 U	890	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	130	1000000 0	1
10132	Tetryl	479-45-8	68 U	68	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	130	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1 U	5.1	10		1
10401	2,4-DB	94-82-6	0.72 U	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93 U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93 U	0.93	2.0		1
10401	MCPA	94-74-6	88 U	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87 U	87	290		1
10401	2,4,5-T	93-76-5	0.095 U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087 U	0.087	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	680 U	680	1,700		1
The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	0.92 U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.12 U	0.12	0.39		1
01363	p,p-DDT	50-29-3	0.70 U	0.076	0.39		1
01363	Delta BHC	319-86-8	0.042 U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.076 U	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39		1
01363	Endrin	72-20-8	0.076 U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.10 U	0.10	0.39		1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.21 U	0.21	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

DDT was not detected in the reextract.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	1.5 J	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0	1
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0	1

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Analysis Report

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	5.8	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120 U	120	580		1
10501	Isopropanol	67-63-0	120 U	120	580		1
10501	Methanol	67-56-1	120 U	120	580		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.8 U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8 U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8 U	5.8	12		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.1		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.1		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.1		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.93 U	0.93	2.8		2
10199	EFH (C15-C20)	n.a.	5.4	0.93	2.8		2
10199	EFH (C21-C30)	n.a.	21	0.93	2.8		2
10199	EFH (C30 - C40)	n.a.	61	0.93	2.8		2
10199	EFH (C8-C11)	n.a.	0.93 U	0.93	2.8		2
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	36,100	5.67	22.5		1
07914	Boron	7440-42-8	1.80 J	1.00	5.63		1
01650	Calcium	7440-70-2	11,000	6.90	22.5		1
01654	Iron	7439-89-6	34,200	10.6	45.1		2
01656	Lithium	7439-93-2	30.7	0.25	2.3		1
01657	Magnesium	7439-95-4	7,900	2.86	11.3		1
06958	Manganese	7439-96-5	433	0.0879	0.563		1
10145	Phosphorus	7723-14-0	297	0.631	11.3		1
01662	Potassium	7440-09-7	4,540	20.3	56.3		1
01667	Sodium	7440-23-5	188	42.0	113		1
07968	Strontium	7440-24-6	49.1	0.0698	0.563		1
06969	Tin	7440-31-5	3.04 J	1.13	11.3		1
06970	Titanium	7440-32-6	1,680	0.428	1.13		1
10146	Zirconium	7440-67-7	7.71	0.946	5.63		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.383	0.0682	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.55	0.0910	0.455		2
06126	Barium	7440-39-3	183	0.307	1.14		5
06127	Beryllium	7440-41-7	1.15	0.0182	0.114		2
06128	Cadmium	7440-43-9	0.417	0.0455	0.114		2
06131	Chromium	7440-47-3	32.6	0.136	0.455		2
06132	Cobalt	7440-48-4	10.2	0.0227	0.114		2
06133	Copper	7440-50-8	22.0	0.0751	0.455		2
06135	Lead	7439-92-1	14.7	0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.636	0.0569	0.114		2
06139	Nickel	7440-02-0	29.4	0.114	0.455		2
06141	Selenium	7782-49-2	0.144 J	0.0455	0.455		2
06142	Silver	7440-22-4	0.0757 J	0.0136	0.114		2
06145	Thallium	7440-28-0	0.497	0.0341	0.114		2
06148	Vanadium	7440-62-2	98.3	0.0250	0.114		2
06149	Zinc	7440-66-6	96.9	0.637	3.41		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.110		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	6.2	0.93	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	2.0	0.93	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.8		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.84 J	0.23	1.2		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.57		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.14	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	13.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

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Analysis Report

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Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.

Submitted: 05/24/2011 09:40

14420 Albemarle Point Place

Reported: 11/04/2011 11:53

Suite 210

Chantilly VA 20151

SL019 SDG#: DE159-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 16:55	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:31	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 12:02	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 02:26	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:13	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 11:37	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:48	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:00	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:02	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 14:52	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:08	Heather E Williams	2
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:34	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1

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Analysis Report

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REVISED

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL019 SDG#: DE159-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:25	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:30	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:30	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:32	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:32	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:43	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:52	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 19:38	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:39	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:36	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

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Analysis Report

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REVISED

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL019 SDG#: DE159-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.

Submitted: 05/24/2011 09:40

14420 Albemarle Point Place

Reported: 11/04/2011 11:53

Suite 210

Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	194 U	194	388		10
Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,400	U 1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	190		1
04688	4-Chloroaniline	106-47-8	78	U 78	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	390	U 390	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	78	U 78	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	39	U 39	190		1
04688	4-Methylphenol	106-44-5	39	U 39	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	39	U 39	190		1
04688	4-Nitroaniline	100-01-6	78	U 78	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

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Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	580		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76 U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9		1
10138	Anthracene	120-12-7	0.42 J	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.7 J	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	3.1	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	4.9	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.7 J	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	5.4	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9 U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9 U	6.9	21		1
10138	Chrysene	218-01-9	3.1	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9 U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9 U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9 U	6.9	21		1
10138	Fluoranthene	206-44-0	4.5	0.76	1.9		1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.6 J	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9 U	6.9	21		1
10138	Phenanthrene	85-01-8	1.9 J	0.76	1.9		1
10138	Pyrene	129-00-0	3.5	0.76	1.9		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68 U	68	140	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	46 U	46	140	1000000	1

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Analysis Report

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REVISED

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	91 U	91	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	91 U	91	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	46 U	46	140	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	46 U	46	140	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	46 U	46	140	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	46 U	46	140	1000000 0	1
10132	Nitroglycerin	55-63-0	910 U	910	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	91 U	91	140	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	140	1000000 0	1
10132	4-Nitrotoluene	99-99-0	91 U	91	140	1000000 0	1
10132	PETN	78-11-5	910 U	910	2,700	1000000 0	1
10132	RDX	121-82-4	57 U	57	140	1000000 0	1
10132	Tetryl	479-45-8	70 U	70	140	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	46 U	46	140	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	46 U	46	140	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1 U	5.1	10		1
10401	2,4-DB	94-82-6	0.72 U	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93 U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93 U	0.93	2.0		1
10401	MCPA	94-74-6	100 J	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87 U	87	290		1
10401	2,4,5-T	93-76-5	0.095 U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087 U	0.087	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	700 U	700	1,700		1
The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.077 U	0.077	0.19		1
01363	Alpha BHC	319-84-6	0.040 U	0.040	0.19		1
01363	Beta BHC	319-85-7	0.070 U	0.070	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.040 U	0.040	0.19		1
01363	Chlordane	57-74-9	1.1 J	0.93	4.0		1
01363	p,p-DDD	72-54-8	0.077 U	0.077	0.40		1
01363	p,p-DDE	72-55-9	0.12 U	0.12	0.40		1
01363	p,p-DDT	50-29-3	1.0	0.077	0.40		1
01363	Delta BHC	319-86-8	0.042 U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.077 U	0.077	0.40		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.26 U	0.26	0.40		1
01363	Endosulfan Sulfate	1031-07-8	0.077 U	0.077	0.40		1
01363	Endrin	72-20-8	0.094 U	0.094	0.40		1
01363	Endrin Aldehyde	7421-93-4	0.094 U	0.094	0.40		1
01363	Endrin Ketone	53494-70-5	0.077 U	0.077	0.40		1
01363	Heptachlor	76-44-8	0.070 U	0.070	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.047 U	0.047	0.19		1
01363	Methoxychlor	72-43-5	0.40 U	0.40	1.9		1
01363	Mirex	2385-85-5	0.10 U	0.10	0.40		1
01363	Toxaphene	8001-35-2	2.6 U	2.6	7.7		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of DDT detected in the reextract is .24 ug/kg. Chlordane was not detected in the reextract.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	9.7	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0	1

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Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	6.8	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120 U	120	580		1
10501	Isopropanol	67-63-0	120 U	120	580		1
10501	Methanol	67-56-1	120 U	120	580		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.8 U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8 U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8 U	5.8	12		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.1		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.1		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.1		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.47 U	0.47	1.4		1
10199	EFH (C15-C20)	n.a.	3.9	0.47	1.4		1
10199	EFH (C21-C30)	n.a.	20	0.47	1.4		1
10199	EFH (C30 - C40)	n.a.	26	0.47	1.4		1
10199	EFH (C8-C11)	n.a.	0.47 U	0.47	1.4		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	38,800	5.80	23.1		1
07914	Boron	7440-42-8	1.71 J	1.03	5.76		1
01650	Calcium	7440-70-2	9,700	7.07	23.1		1
01654	Iron	7439-89-6	34,400	10.9	46.1		2
01656	Lithium	7439-93-2	32.3	0.25	2.3		1
01657	Magnesium	7439-95-4	8,080	2.93	11.5		1
06958	Manganese	7439-96-5	370	0.0899	0.576		1
10145	Phosphorus	7723-14-0	239	0.645	11.5		1
01662	Potassium	7440-09-7	4,470	20.7	57.6		1
01667	Sodium	7440-23-5	163	43.0	115		1
07968	Strontium	7440-24-6	46.6	0.0715	0.576		1
06969	Tin	7440-31-5	2.96 J	1.15	11.5		1
06970	Titanium	7440-32-6	1,700	0.438	1.15		1

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Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
10146	Zirconium	7440-67-7	7.90	0.968	5.76	mg/kg	1
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.351	0.0685	0.228	mg/kg	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.36	0.0913	0.457		2
06126	Barium	7440-39-3	204	0.123	0.457		2
06127	Beryllium	7440-41-7	1.02	0.0183	0.114		2
06128	Cadmium	7440-43-9	0.458	0.0457	0.114		2
06131	Chromium	7440-47-3	29.2	0.137	0.457		2
06132	Cobalt	7440-48-4	9.04	0.0228	0.114		2
06133	Copper	7440-50-8	21.0	0.0753	0.457		2
06135	Lead	7439-92-1	14.7	0.0119	0.228		2
06138	Molybdenum	7439-98-7	0.632	0.0571	0.114		2
06139	Nickel	7440-02-0	28.4	0.114	0.457		2
06141	Selenium	7782-49-2	0.104 J	0.0457	0.457		2
06142	Silver	7440-22-4	0.0740 J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.463	0.0342	0.114		2
06148	Vanadium	7440-62-2	96.6	0.0251	0.114		2
06149	Zinc	7440-66-6	89.9	0.639	3.42		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.111		1
Wet Chemistry							
		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	5.6	0.93	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.5 J	0.93	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.5 U	10.5	34.9		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.81 J	0.23	1.2		1
		SW-846 9012B	mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.56		1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.09	0.0100	0.0100		1
Wet Chemistry							
		EPA 160.3 modified	%	%	%	%	
11624	Moisture Content by 160.3	n.a.	14.1	0.50	0.50		1

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Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	EPA 160.3 modified	%	%	%	%	%	
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:13	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:58	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 17:23	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 03:08	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:22	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 12:04	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 08:15	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:18	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:13	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:15	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 15:37	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 17:18	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1

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Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL021 SDG#: DE159-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:38	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:31	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:31	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:45	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:18	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 23:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 21:28	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL021 SDG#: DE159-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:50	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:37	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	19.1 U	19.1	38.3		1
The surrogate recoveries are outside of QC limits. The matrix spike sample was analyzed and surrogate recoveries are again outside of QC limits, indicating a matrix effect.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	27	J 19	380		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
	The LCS and/or LCS recovery are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U 0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U 0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U 0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U 0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U 0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	2.0	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U 0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U 0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U 6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U 6.9	21		1
10138	Chrysene	218-01-9	0.96	J 0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U 0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U 6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U 6.9	21		1
10138	Fluoranthene	206-44-0	0.76	U 0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U 0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U 0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U 0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U 0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U 0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U 0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U 6.9	21		1
10138	Phenanthrene	85-01-8	0.76	U 0.76	1.9		1
10138	Pyrene	129-00-0	0.76	U 0.76	1.9		1

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U 68	140
					1000000 0

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Analysis Report

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REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45 U	45	140	1000000 0	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90 U	90	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90 U	90	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	140	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	140	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	140	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	140	1000000 0	1
10132	Nitroglycerin	55-63-0	900 U	900	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	90 U	90	140	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	140	1000000 0	1
10132	4-Nitrotoluene	99-99-0	90 U	90	140	1000000 0	1
10132	PETN	78-11-5	900 U	900	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	140	1000000 0	1
10132	Tetryl	479-45-8	69 U	69	140	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	140	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	140	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.1		1
10401	Dalapon	75-99-0	5.1 U	5.1	10		1
10401	2,4-DB	94-82-6	0.71 U	0.71	2.0		1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92 U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92 U	0.92	2.0		1
10401	MCPA	94-74-6	87 U	87	290		1
10401	MCPP (Mecoprop)	93-65-2	86 U	86	290		1
10401	2,4,5-T	93-76-5	0.094 U	0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.16 J	0.086	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent

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Analysis Report

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REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor

the lowest reporting limits attainable.

HPLC Organics

SW-846 8315A

			ug/kg		ug/kg	ug/kg	ug/kg
04173	25a Formaldehyde	8315A	50-00-0	690 U	690	1,700	1

The LCS recovery for formaldehyde is outside the QC limits.
Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.

Pesticides/PCBs

SW-846 8081A

			ug/kg		ug/kg	ug/kg	ug/kg
01363	Aldrin	309-00-2	0.076 U	0.076	0.19	1	
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19	1	
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19	1	
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19	1	
01363	Chlordane	57-74-9	0.98 J	0.92	3.9	1	
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39	1	
01363	p,p-DDE	72-55-9	0.076 U	0.076	0.39	1	
01363	p,p-DDT	50-29-3	0.52	0.076	0.39	1	
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19	1	
01363	Dieldrin	60-57-1	0.11 J	0.076	0.39	1	
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.19	1	
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39	1	
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39	1	
01363	Endrin	72-20-8	0.076 U	0.076	0.39	1	
01363	Endrin Aldehyde	7421-93-4	0.076 U	0.076	0.39	1	
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39	1	
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19	1	
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19	1	
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9	1	
01363	Mirex	2385-85-5	0.12 J	0.076	0.39	1	
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6	1	

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

The concentration of DDT detected in the reextract is .17 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.

Pesticides/PCBs

SW-846 8082

			ug/kg		ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1	
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1	
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.8	1	
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9	1	
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9	1	
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9	1	

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Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
REVISED
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.45 U	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	570		1
10501	Isopropanol	67-63-0	110 U	110	570		1
10501	Methanol	67-56-1	110 U	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7 U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7 U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7 U	5.7	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.0		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	4.6 U	4.6	14		10
10199	EFH (C15-C20)	n.a.	6.4 J	4.6	14		10
10199	EFH (C21-C30)	n.a.	60	4.6	14		10
10199	EFH (C30 - C40)	n.a.	290	4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6 U	4.6	14		10
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	30,200	5.66	22.5		1
07914	Boron	7440-42-8	2.82 J	1.00	5.63		1
01650	Calcium	7440-70-2	18,500	6.90	22.5		1
01654	Iron	7439-89-6	32,000	10.6	45.0		2
01656	Lithium	7439-93-2	26.1	0.25	2.3		1
01657	Magnesium	7439-95-4	6,650	2.86	11.3		1
06958	Manganese	7439-96-5	451	0.0878	0.563		1
10145	Phosphorus	7723-14-0	357	0.630	11.3		1
01662	Potassium	7440-09-7	4,400	20.3	56.3		1
01667	Sodium	7440-23-5	143	42.0	113		1
07968	Strontium	7440-24-6	41.8	0.0698	0.563		1
06969	Tin	7440-31-5	3.22 J	1.13	11.3		1
06970	Titanium	7440-32-6	1,660	0.428	1.13		1
10146	Zirconium	7440-67-7	6.98	0.945	5.63		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.510	0.0682	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.16	0.0909	0.455		2
06126	Barium	7440-39-3	199	0.123	0.455		2
06127	Beryllium	7440-41-7	1.01	0.0182	0.114		2
06128	Cadmium	7440-43-9	0.727	0.0455	0.114		2
06131	Chromium	7440-47-3	30.1	0.136	0.455		2
06132	Cobalt	7440-48-4	13.0	0.0227	0.114		2
06133	Copper	7440-50-8	22.8	0.0750	0.455		2
06135	Lead	7439-92-1	20.0	0.0118	0.227		2
06138	Molybdenum	7439-98-7	1.50	0.0568	0.114		2
06139	Nickel	7440-02-0	28.9	0.114	0.455		2
06141	Selenium	7782-49-2	0.232 J	0.0455	0.455		2
06142	Silver	7440-22-4	0.0712 J	0.0136	0.114		2
06145	Thallium	7440-28-0	0.491	0.0341	0.114		2
06148	Vanadium	7440-62-2	91.4	0.0250	0.114		2
06149	Zinc	7440-66-6	162	0.637	3.41		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0463 J	0.0032	0.110		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.7	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.6 J	0.92	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.4		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.74 J	0.23	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.55		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.04	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

Submitted: 05/24/2011 09:40

14420 Albemarle Point Place

Reported: 11/04/2011 11:53

Suite 210

Chantilly VA 20151

SL022 SDG#: DE159-13BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 21:32	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 05:37	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 15:55	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 03:50	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:32	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 08:51	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 08:43	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:37	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:28	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:28	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 17:52	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 19:23	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:06	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 06:58	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 06:58	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 06:58	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:46	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:07	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:00	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:07	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:41	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

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Analysis Report

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REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 9

REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	229	19.1	38.3		1
The surrogate recoveries are outside of QC limits. The background sample was analyzed and surrogate recoveries are again outside of QC limits, indicating a matrix effect.							
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,800	19	190		1
04688	Acenaphthylene	208-96-8	1,900	19	190		1
04688	Aniline	62-53-3	1,400	190	570		1
04688	Anthracene	120-12-7	1,900	19	190		1
04688	Benidine	92-87-5	2,500	J 1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,900	19	190		1
04688	Benzo(a)pyrene	50-32-8	1,900	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,900	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,900	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800	19	190		1
04688	Benzoic acid	65-85-0	1,100	190	570		1
04688	Benzyl alcohol	100-51-6	2,100	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700	19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,800	19	190		1
04688	Carbazole	86-74-8	1,900	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	2,100	38	190		1
04688	4-Chloroaniline	106-47-8	1,500	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,700	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,600	19	190		1
04688	2-Chloronaphthalene	91-58-7	2,700	19	190		1
04688	2-Chlorophenol	95-57-8	1,900	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900	38	190		1
04688	Chrysene	218-01-9	1,900	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,900	19	190		1
04688	Dibenzofuran	132-64-9	1,900	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,500	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,400	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,500	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,500	110	380		1
04688	2,4-Dichlorophenol	120-83-2	2,000	19	190		1
04688	Diethylphthalate	84-66-2	1,900	19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,800	38	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000	38	190		1
04688	Dimethylphthalate	131-11-3	1,800	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,500	190	570		1
04688	2,4-Dinitrophenol	51-28-5	2,500	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	2,100	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,900	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,800	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,200	19	380		1
04688	Fluoranthene	206-44-0	1,700	19	190		1
04688	Fluorene	86-73-7	1,900	19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorobenzene	118-74-1	1,800	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,300	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,600	190	570		1
04688	Hexachloroethane	67-72-1	1,400	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,900	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,700	19	190		1
04688	2-Methylphenol	95-48-7	1,900	38	190		1
04688	4-Methylphenol	106-44-5	2,100	38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,100	19	190		1
04688	3-Nitroaniline	99-09-2	2,100	38	190		1
04688	4-Nitroaniline	100-01-6	1,700	76	190		1
04688	Nitrobenzene	98-95-3	1,700	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	1,800	190	570		1
04688	N-Nitrosodimethylamine	62-75-9	1,600	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,600	190	570		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	2,000	19	190		1
04688	Pyrene	129-00-0	2,100	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,600	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	1,900	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	1,900	38	190		1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:							
2-nitrophenol							
4-bromophenyl-phenylether							
hexachlorobenzene							
hexachlorobutadiene							
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	39	0.76	1.9		1
10138	Acenaphthylene	208-96-8	38	0.38	1.9		1
10138	Anthracene	120-12-7	40	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	37	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	48	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	53	0.76	1.9		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Benzo(g,h,i)perylene	191-24-2	32	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	49	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	40	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	47	6.9	21		1
10138	Chrysene	218-01-9	38	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	37	0.76	1.9		1
10138	Diethylphthalate	84-66-2	41	6.9	21		1
10138	Dimethylphthalate	131-11-3	40	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	39	6.9	21		1
10138	Fluoranthene	206-44-0	43	0.76	1.9		1
10138	Fluorene	86-73-7	40	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	35	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	39	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	35	0.76	1.9		1
10138	Naphthalene	91-20-3	37	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	39	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	53	6.9	21		1
10138	Phenanthrene	85-01-8	39	0.76	1.9		1
10138	Pyrene	129-00-0	34	0.76	1.9		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,600	69	140		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,600	46	140		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	92 U	92	280		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	92 U	92	280		1
10132	1,3-Dinitrobenzene	99-65-0	2,700	46	140		1
10132	2,4-Dinitrotoluene	121-14-2	2,500	46	140		1
10132	2,6-Dinitrotoluene	606-20-2	2,500	46	140		1
10132	HMX	2691-41-0	2,300	110	340		1
10132	Nitrobenzene	98-95-3	2,600	46	140		1
10132	Nitroglycerin	55-63-0	56,000	920	2,800		1
10132	2-Nitrotoluene	88-72-2	2,400	92	140		1
10132	3-Nitrotoluene	99-08-1	2,600	110	140		1
10132	4-Nitrotoluene	99-99-0	2,400	92	140		1
10132	PETN	78-11-5	70,000	920	2,800		1
10132	RDX	121-82-4	2,100	57	140		1
10132	Tetryl	479-45-8	2,100	70	140		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,500	46	140		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,600	46	140		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	9.7	1.4	4.1		1
10401	Dalapon	75-99-0	14	5.0	10		1
10401	2,4-DB	94-82-6	5.9	0.71	1.9		1
10401	Dicamba	1918-00-9	0.82 J	0.46	1.4		1
10401	Dinoseb	88-85-7	1.4 J	0.92	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	9.6	0.92	1.9		1
10401	MCPA	94-74-6	850	87	290		1
10401	MCPP (Mecoprop)	93-65-2	670	86	290		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	0.67	0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.72	0.086	0.20		1
The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							

HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde	8315A 50-00-0	4,500	690	1,700		1
The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							

Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.15 J	0.076	0.20		1
01363	Alpha BHC	319-84-6	0.22	0.039	0.20		1
01363	Beta BHC	319-85-7	0.17 J	0.069	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.24	0.039	0.20		1
01363	Chlordane	57-74-9	0.92 U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.39	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.46	0.076	0.39		1
01363	p,p-DDT	50-29-3	1.2	0.076	0.39		1
01363	Delta BHC	319-86-8	0.18 J	0.041	0.20		1
01363	Dieldrin	60-57-1	0.57	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.14 J	0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.23 J	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.42	0.076	0.39		1
01363	Endrin	72-20-8	0.37 J	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.30 J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.25 J	0.076	0.39		1
01363	Heptachlor	76-44-8	0.26	0.069	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.16 J	0.039	0.20		1
01363	Methoxychlor	72-43-5	2.9	0.39	1.9		1
01363	Mirex	2385-85-5	0.076 U	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5460	11126-42-4	2.2 J	1.1	3.8		1
10225	PCB-1016	12674-11-2	17	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	19	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	1,900	110	570		1
10501	Isopropanol	67-63-0	2,000	110	570		1
10501	Methanol	67-56-1	2,000	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	96	5.7	11		1
08283	Ethylene glycol	107-21-1	160	5.7	11		1
08283	Propylene glycol	57-55-6	160	5.7	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.6 J	1.5	4.0		1
10318	o-Terphenyl	84-15-1	1.9 J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.8 J	1.7	4.0		1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	4.6 U	4.6	14		10
10199	EFH (C15-C20)	n.a.	7.0 J	4.6	14		10
10199	EFH (C21-C30)	n.a.	55	4.6	14		10
10199	EFH (C30 - C40)	n.a.	240	4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6 U	4.6	14		10
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	33,500	5.55	22.1		1
07914	Boron	7440-42-8	220	0.983	5.52		1
01650	Calcium	7440-70-2	8,290	6.77	22.1		1
01654	Iron	7439-89-6	32,800	10.4	44.2		2
01656	Lithium	7439-93-2	137	0.24	2.2		1
01657	Magnesium	7439-95-4	7,140	2.80	11.0		1
06958	Manganese	7439-96-5	527	0.0861	0.552		1
10145	Phosphorus	7723-14-0	498	0.618	11.0		1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals			SW-846 6010B	mg/kg	mg/kg	mg/kg	
01662	Potassium	7440-09-7	6,180	19.9	55.2		1
01667	Sodium	7440-23-5	1,230	41.2	110		1
07968	Strontium	7440-24-6	144	0.0684	0.552		1
06969	Tin	7440-31-5	390	1.10	11.0		1
06970	Titanium	7440-32-6	1,900	0.420	1.10		1
10146	Zirconium	7440-67-7	111	0.927	5.52		1
			SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.31	0.0675	0.225		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	10.2	0.0900	0.450		2
06126	Barium	7440-39-3	202	0.122	0.450		2
06127	Beryllium	7440-41-7	1.88	0.0180	0.113		2
06128	Cadmium	7440-43-9	1.88	0.0450	0.113		2
06131	Chromium	7440-47-3	41.3	0.135	0.450		2
06132	Cobalt	7440-48-4	64.0	0.0225	0.113		2
06133	Copper	7440-50-8	34.2	0.0743	0.450		2
06135	Lead	7439-92-1	24.1	0.0117	0.225		2
06138	Molybdenum	7439-98-7	15.2	0.0563	0.113		2
06139	Nickel	7440-02-0	46.7	0.113	0.450		2
06141	Selenium	7782-49-2	2.69	0.0450	0.450		2
06142	Silver	7440-22-4	14.3	0.0135	0.113		2
06145	Thallium	7440-28-0	0.974	0.0338	0.113		2
06148	Vanadium	7440-62-2	105	0.0248	0.113		2
06149	Zinc	7440-66-6	199	0.630	3.38		2
			SW-846 7471A	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.231	0.0031	0.108		1
Wet Chemistry			EPA 300.0	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.9	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	12.0	0.92	1.7		1
			EPA 314.0	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	681	10.3	34.4		1
			SW-846 7199	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	45.7	1.1	5.7		5
			SW-846 9012B	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	5.9	0.20	0.55		1
Wet Chemistry			EPA 160.3 modified	%	%	%	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 9

REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 21:49	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 06:03	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 16:30	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 04:33	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:41	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 09:19	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 09:10	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:55	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:43	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:53	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 18:37	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 19:48	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:17	Eric L Eby	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:07	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:08	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:08	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:07	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:07	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:48	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:35	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:44	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:19	Elyse P Brunstetter	5
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:43	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 9 of 9

REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	231	19.1	38.3		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900	19	190		1
04688	Acenaphthylene	208-96-8	1,900	19	190		1
04688	Aniline	62-53-3	1,400	190	570		1
04688	Anthracene	120-12-7	1,900	19	190		1
04688	Benzidine	92-87-5	2,800	J 1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,900	19	190		1
04688	Benzo(a)pyrene	50-32-8	1,900	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,900	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,900	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800	19	190		1
04688	Benzoic acid	65-85-0	1,200	190	570		1
04688	Benzyl alcohol	100-51-6	2,200	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700	19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,800	19	190		1
04688	Carbazole	86-74-8	1,900	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	2,100	38	190		1
04688	4-Chloroaniline	106-47-8	1,600	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,700	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,800	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800	19	190		1
04688	2-Chloronaphthalene	91-58-7	1,600	19	190		1
04688	2-Chlorophenol	95-57-8	2,000	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900	38	190		1
04688	Chrysene	218-01-9	1,900	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,900	19	190		1
04688	Dibenzofuran	132-64-9	1,900	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,700	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,600	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,700	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,500	110	380		1
04688	2,4-Dichlorophenol	120-83-2	2,000	19	190		1
04688	Diethylphthalate	84-66-2	1,900	19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,800	38	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000	38	190		1
04688	Dimethylphthalate	131-11-3	1,900	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,300	190	570		1
04688	2,4-Dinitrophenol	51-28-5	2,000	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	2,100	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	2,000	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,800	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	19	380		1
04688	Fluoranthene	206-44-0	1,800	19	190		1
04688	Fluorene	86-73-7	2,000	19	190		1
04688	Hexachlorobenzene	118-74-1	1,800	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,500	76	190		1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorocyclopentadiene	77-47-4	2,700	190	570		1
04688	Hexachloroethane	67-72-1	1,500	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	2,000	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,900	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,800	19	190		1
04688	2-Methylphenol	95-48-7	2,000	38	190		1
04688	4-Methylphenol	106-44-5	2,100	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,100	19	190		1
04688	3-Nitroaniline	99-09-2	2,100	38	190		1
04688	4-Nitroaniline	100-01-6	1,700	76	190		1
04688	Nitrobenzene	98-95-3	1,700	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	1,700	190	570		1
04688	N-Nitrosodimethylamine	62-75-9	1,700	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	2,000	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,600	190	570		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	2,100	19	190		1
04688	Pyrene	129-00-0	2,000	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,700	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	2,000	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	37	0.76	1.9		1
10138	Acenaphthylene	208-96-8	36	0.38	1.9		1
10138	Anthracene	120-12-7	39	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	38	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	48	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	54	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	28	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	50	0.76	1.9		1

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Butylbenzylphthalate	85-68-7	42	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	45	6.9	21		1
10138	Chrysene	218-01-9	39	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	33	0.76	1.9		1
10138	Diethylphthalate	84-66-2	39	6.9	21		1
10138	Dimethylphthalate	131-11-3	38	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	39	6.9	21		1
10138	Fluoranthene	206-44-0	45	0.76	1.9		1
10138	Fluorene	86-73-7	39	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	32	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	36	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	32	0.76	1.9		1
10138	Naphthalene	91-20-3	34	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	37	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	54	6.9	21		1
10138	Phenanthrene	85-01-8	40	0.76	1.9		1
10138	Pyrene	129-00-0	36	0.76	1.9		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,500	69	140		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,500	46	140		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	92	U	280		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	92	U	280		1
10132	1,3-Dinitrobenzene	99-65-0	2,600	46	140		1
10132	2,4-Dinitrotoluene	121-14-2	2,500	46	140		1
10132	2,6-Dinitrotoluene	606-20-2	2,500	46	140		1
10132	HMX	2691-41-0	2,200	110	340		1
10132	Nitrobenzene	98-95-3	2,600	46	140		1
10132	Nitroglycerin	55-63-0	55,000	920	2,800		1
10132	2-Nitrotoluene	88-72-2	2,400	92	140		1
10132	3-Nitrotoluene	99-08-1	2,600	110	140		1
10132	4-Nitrotoluene	99-99-0	2,400	92	140		1
10132	PETN	78-11-5	67,000	920	2,800		1
10132	RDX	121-82-4	2,100	57	140		1
10132	Tetryl	479-45-8	1,800	70	140		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,400	46	140		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,500	46	140		1
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	8.9	1.4	4.1		1
10401	Dalapon	75-99-0	11	5.0	10		1
10401	2,4-DB	94-82-6	6.4	0.71	1.9		1
10401	Dicamba	1918-00-9	0.69	0.46	1.4		1
10401	Dinoseb	88-85-7	1.1	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	8.3	0.91	1.9		1
10401	MCPA	94-74-6	710	87	290		1
10401	MCPP (Mecoprop)	93-65-2	740	86	290		1
10401	2,4,5-T	93-76-5	0.56	0.093	0.20		1
10401	2,4,5-TP	93-72-1	0.64	0.086	0.20		1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	4,500	690	1,700		1
The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.17 J	0.076	0.20		1
01363	Alpha BHC	319-84-6	0.23	0.039	0.20		1
01363	Beta BHC	319-85-7	0.20	0.069	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.24	0.039	0.20		1
01363	Chlordane	57-74-9	0.92 U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.42	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.37 J	0.076	0.39		1
01363	p,p-DDT	50-29-3	1.5	0.076	0.39		1
01363	Delta BHC	319-86-8	0.20	0.041	0.20		1
01363	Dieldrin	60-57-1	0.46	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.16 J	0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.39	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.42	0.076	0.39		1
01363	Endrin	72-20-8	0.41	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.25 J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.32 J	0.076	0.39		1
01363	Heptachlor	76-44-8	0.29	0.069	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.20	0.039	0.20		1
01363	Methoxychlor	72-43-5	3.8	0.39	1.9		1
01363	Mirex	2385-85-5	0.076 U	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.5		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	4.0	1.1	3.8	1
10225	PCB-1016	12674-11-2	21	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9	1
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9	1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	21	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	1,800	110	570		1
10501	Isopropanol	67-63-0	2,000	110	570		1
10501	Methanol	67-56-1	2,000	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	93	5.7	11		1
08283	Ethylene glycol	107-21-1	150	5.7	11		1
08283	Propylene glycol	57-55-6	160	5.7	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.5 J	1.5	4.0		1
10318	o-Terphenyl	84-15-1	1.8 J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.8 J	1.7	4.0		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	4.6 U	4.6	14		10
10199	EFH (C15-C20)	n.a.	8.1 J	4.6	14		10
10199	EFH (C21-C30)	n.a.	110	4.6	14		10
10199	EFH (C30 - C40)	n.a.	400	4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6 U	4.6	14		10
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	35,600	5.66	22.5		1
07914	Boron	7440-42-8	225	1.00	5.63		1
01650	Calcium	7440-70-2	9,590	6.90	22.5		1
01654	Iron	7439-89-6	31,600	10.6	45.0		2
01656	Lithium	7439-93-2	143	0.25	2.3		1
01657	Magnesium	7439-95-4	7,350	2.86	11.3		1
06958	Manganese	7439-96-5	468	0.0878	0.563		1
10145	Phosphorus	7723-14-0	458	0.630	11.3		1
01662	Potassium	7440-09-7	6,140	20.3	56.3		1
01667	Sodium	7440-23-5	1,240	42.0	113		1
07968	Strontium	7440-24-6	148	0.0698	0.563		1
06969	Tin	7440-31-5	393	1.13	11.3		1
06970	Titanium	7440-32-6	1,980	0.428	1.13		1
10146	Zirconium	7440-67-7	113	0.945	5.63		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.51	0.0675	0.225		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	11.4	0.0900	0.450		2
06126	Barium	7440-39-3	159	0.122	0.450		2
06127	Beryllium	7440-41-7	2.10	0.0180	0.113		2
06128	Cadmium	7440-43-9	2.25	0.0450	0.113		2
06131	Chromium	7440-47-3	39.7	0.135	0.450		2
06132	Cobalt	7440-48-4	64.0	0.0225	0.113		2
06133	Copper	7440-50-8	39.0	0.0743	0.450		2
06135	Lead	7439-92-1	28.4	0.0117	0.225		2
06138	Molybdenum	7439-98-7	17.3	0.0563	0.113		2
06139	Nickel	7440-02-0	45.2	0.113	0.450		2
06141	Selenium	7782-49-2	2.97	0.0450	0.450		2
06142	Silver	7440-22-4	16.4	0.0135	0.113		2
06145	Thallium	7440-28-0	1.17	0.0338	0.113		2
06148	Vanadium	7440-62-2	117	0.0248	0.113		2
06149	Zinc	7440-66-6	178	0.630	3.38		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.216	0.0032	0.112		1
Wet Chemistry		EPA 160.3 modified	%	%	%	%	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 22:07	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 06:30	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 17:02	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 05:15	James H Place	1

*=This limit was used in the evaluation of the final result

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Analysis Report

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Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:51	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 09:46	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 09:24	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:14	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:06	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 19:22	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 20:13	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:20	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:10	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL022 SDG#: DE159-13MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:52	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	30,700	5.72	22.7		1
07914	Boron	7440-42-8	1.87 J	1.01	5.68		1
01650	Calcium	7440-70-2	8,480	6.97	22.7		1
01654	Iron	7439-89-6	31,900	10.7	45.5		2
01656	Lithium	7439-93-2	26.6	0.25	2.3		1
01657	Magnesium	7439-95-4	6,920	2.89	11.4		1
06958	Manganese	7439-96-5	435	0.0887	0.568		1
10145	Phosphorus	7723-14-0	344	0.637	11.4		1
01662	Potassium	7440-09-7	4,400	20.5	56.8		1
01667	Sodium	7440-23-5	140	42.4	114		1
07968	Strontium	7440-24-6	39.3	0.0705	0.568		1
06969	Tin	7440-31-5	3.16 J	1.14	11.4		1
06970	Titanium	7440-32-6	1,620	0.432	1.14		1
10146	Zirconium	7440-67-7	6.80	0.955	5.68		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.296	0.0675	0.225		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.08	0.0900	0.450		2
06126	Barium	7440-39-3	139	0.122	0.450		2
06127	Beryllium	7440-41-7	0.776	0.0180	0.113		2
06128	Cadmium	7440-43-9	0.373	0.0450	0.113		2
06131	Chromium	7440-47-3	28.4	0.135	0.450		2
06132	Cobalt	7440-48-4	9.51	0.0225	0.113		2
06133	Copper	7440-50-8	17.1	0.0743	0.450		2
06135	Lead	7439-92-1	17.2	0.0117	0.225		2
06138	Molybdenum	7439-98-7	1.14	0.0563	0.113		2
06139	Nickel	7440-02-0	20.6	0.113	0.450		2
06141	Selenium	7782-49-2	0.139 J	0.0450	0.450		2
06142	Silver	7440-22-4	0.136	0.0135	0.113		2
06145	Thallium	7440-28-0	0.337	0.0338	0.113		2
06148	Vanadium	7440-62-2	67.4	0.0248	0.113		2
06149	Zinc	7440-66-6	152	0.630	3.38		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0155 J	0.0031	0.108		1
Wet Chemistry							
		EPA 300.0	mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.6	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2 J	0.92	1.7		1
		EPA 314.0	ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.4		1
		SW-846 7199	mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.88 J	0.23	1.1		1

*=This limit was used in the evaluation of the final result

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Analysis Report

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REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry							
05895	17a Cyanide by 9012B	SW-846 9012B 57-12-5	mg/kg 0.20 U	mg/kg 0.20	mg/kg 0.57	mg/kg	1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.00	0.0100	0.0100		1
Wet Chemistry							
		EPA 160.3 modified	%	%	%	%	
11626	28a Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:13	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:04	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:06	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:06	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL022 SDG#: DE159-13DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:04	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:04	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:47	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:21	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:22	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:53	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:42	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	42.3	19.0	38.1		1
The surrogate standard n-nitrosodimethylamine-d6 was outside of the advisory QC windows.							
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	570		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	570		1
04688	Benzyl alcohol	100-51-6	190	U 190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	75	U 75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U 75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	570		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	75	U 75	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

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Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U 190	570		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:						
	2-nitrophenol						
	4-bromophenyl-phenylether						
	hexachlorobenzene						
	hexachlorobutadiene						
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76 U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38 U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38 U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.2 J	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	1.8 J	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	4.8	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.0 J	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76 U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8 U	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	6.8 U	6.8	20		1
10138	Chrysene	218-01-9	1.5 J	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76 U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.8 U	6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8 U	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.8 U	6.8	20		1
10138	Fluoranthene	206-44-0	2.1	0.76	1.9		1
10138	Fluorene	86-73-7	0.76 U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.88 J	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76 U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76 U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76 U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76 U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8 U	6.8	20		1
10138	Phenanthrene	85-01-8	0.88 J	0.76	1.9		1
10138	Pyrene	129-00-0	1.7 J	0.76	1.9		1
Explosives	SW-846 8330A		ug/kg	ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67 U	67	130	1000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45 U	45	130	1000000	1

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Analysis Report

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REVISED

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

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Reported: 11/04/2011 11:53

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90 U	90	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90 U	90	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	130	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	130	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	130	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	130	1000000 0	1
10132	Nitroglycerin	55-63-0	900 U	900	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	90 U	90	130	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	130	1000000 0	1
10132	4-Nitrotoluene	99-99-0	90 U	90	130	1000000 0	1
10132	PETN	78-11-5	900 U	900	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	130	1000000 0	1
10132	Tetryl	479-45-8	68 U	68	130	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	130	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	130	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.9 J	1.4	4.1		1
10401	Dalapon	75-99-0	5.0 U	5.0	10		1
10401	2,4-DB	94-82-6	0.70 U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45 U	0.45	1.4		1
10401	Dinoseb	88-85-7	0.91 U	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91 U	0.91	1.9		1
10401	MCPA	94-74-6	270 J	86	280		1
10401	MCPP (Mecoprop)	93-65-2	85 U	85	280		1
10401	2,4,5-T	93-76-5	0.093 U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085 U	0.085	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

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Analysis Report

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Page 4 of 9

REVISED

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics		SW-846 8315A	ug/kg	ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	680 U	680	1,700		1
The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.075 U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.068 U	0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	4.4	0.91	3.9		1
01363	p,p-DDD	72-54-8	0.075 U	0.075	0.39		1
01363	p,p-DDE	72-55-9	0.19 J	0.075	0.39		1
01363	p,p-DDT	50-29-3	0.48	0.075	0.39		1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.21 J	0.075	0.39		1
01363	Endosulfan I	959-98-8	0.050 U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	0.075 U	0.075	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.075 U	0.075	0.39		1
01363	Endrin	72-20-8	0.075 U	0.075	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.075 U	0.075	0.39		1
01363	Endrin Ketone	53494-70-5	0.075 U	0.075	0.39		1
01363	Heptachlor	76-44-8	0.068 U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.086 J	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.075 U	0.075	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.5		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Heptachlor epoxide, DDE, and dieldrin are not detected in the reextract. Endosulfan II is detected at .08 ug/kg and mirex is detected at .19 ug/kg in the reextract.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	1.6 J	1.1	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9	1
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9	1

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SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
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Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

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Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	1.6 J	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110 U	110	570		1
10501	Isopropanol	67-63-0	110 U	110	570		1
10501	Methanol	67-56-1	110 U	110	570		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7 U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7 U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7 U	5.7	11		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.0		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.46 U	0.46	1.4		1
10199	EFH (C15-C20)	n.a.	5.1	0.46	1.4		1
10199	EFH (C21-C30)	n.a.	11	0.46	1.4		1
10199	EFH (C30 - C40)	n.a.	40	0.46	1.4		1
10199	EFH (C8-C11)	n.a.	0.46 U	0.46	1.4		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	32,300	5.52	22.0		1
07914	Boron	7440-42-8	2.70 J	0.977	5.49		1
01650	Calcium	7440-70-2	49,000	6.73	22.0		1
01654	Iron	7439-89-6	32,100	10.3	43.9		2
01656	Lithium	7439-93-2	28.7	0.24	2.2		1
01657	Magnesium	7439-95-4	7,310	2.79	11.0		1
06958	Manganese	7439-96-5	448	0.0856	0.549		1
10145	Phosphorus	7723-14-0	316	0.615	11.0		1
01662	Potassium	7440-09-7	4,250	19.8	54.9		1
01667	Sodium	7440-23-5	135	40.9	110		1
07968	Strontium	7440-24-6	51.8	0.0681	0.549		1
06969	Tin	7440-31-5	2.79 J	1.10	11.0		1
06970	Titanium	7440-32-6	1,570	0.417	1.10		1
10146	Zirconium	7440-67-7	7.12	0.922	5.49		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
	SW-846 6020		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.353	0.0672	0.224		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.86	0.0895	0.448		2
06126	Barium	7440-39-3	183	0.121	0.448		2
06127	Beryllium	7440-41-7	1.01	0.0179	0.112		2
06128	Cadmium	7440-43-9	0.329	0.0448	0.112		2
06131	Chromium	7440-47-3	33.1	0.134	0.448		2
06132	Cobalt	7440-48-4	10.1	0.0224	0.112		2
06133	Copper	7440-50-8	20.1	0.0739	0.448		2
06135	Lead	7439-92-1	12.8	0.0116	0.224		2
06138	Molybdenum	7439-98-7	0.562	0.0560	0.112		2
06139	Nickel	7440-02-0	26.3	0.112	0.448		2
06141	Selenium	7782-49-2	0.0791 J	0.0448	0.448		2
06142	Silver	7440-22-4	0.0701 J	0.0134	0.112		2
06145	Thallium	7440-28-0	0.463	0.0336	0.112		2
06148	Vanadium	7440-62-2	87.2	0.0246	0.112		2
06149	Zinc	7440-66-6	86.5	0.627	3.36		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.112		1
Wet Chemistry							
	EPA 300.0		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4	0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1 J	0.91	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.2		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.1 J	0.23	1.1		1
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.57		1
	SW-846 9045C modified		Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	7.99	0.0100	0.0100		1
Wet Chemistry							
	EPA 160.3 modified		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	12.4	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.

Submitted: 05/24/2011 09:40

14420 Albemarle Point Place

Reported: 11/04/2011 11:53

Suite 210

Chantilly VA 20151

SL023 SDG#: DE159-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:30	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 17:24	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 16:46	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 05:58	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 10:10	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 12:32	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 11:13	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:32	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 23:43	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:44	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 14:06	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 17:43	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:48	Eric L Eby	2

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL023 SDG#: DE159-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:38	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:33	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:33	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:38	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:38	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:53	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:32	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 23:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 21:50	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 18:16	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201B	05/31/2011 19:45	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201B	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

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Analysis Report

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REVISED

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL023 SDG#: DE159-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,900		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U 39	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U 39	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U 39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U 39	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	390	U 390	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	39	U 39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	390		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	39	U 39	190		1
04688	4-Methylphenol	106-44-5	39	U 39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	39	U 39	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	580		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U 39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U 39	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.8 U	3.8	9.6	5
10138	Acenaphthylene	208-96-8	1.9 U	1.9	9.6	5
10138	Anthracene	120-12-7	1.9 U	1.9	9.6	5
10138	Benzo(a)anthracene	56-55-3	3.8 U	3.8	9.6	5
10138	Benzo(a)pyrene	50-32-8	3.8 U	3.8	9.6	5
10138	Benzo(b)fluoranthene	205-99-2	13	3.8	9.6	5
10138	Benzo(g,h,i)perylene	191-24-2	3.8 U	3.8	9.6	5
10138	Benzo(k)fluoranthene	207-08-9	3.8 U	3.8	9.6	5
10138	Chrysene	218-01-9	6.8 J	1.9	9.6	5
10138	Dibenz(a,h)anthracene	53-70-3	3.8 U	3.8	9.6	5
10138	Fluoranthene	206-44-0	10	3.8	9.6	5
10138	Fluorene	86-73-7	3.8 U	3.8	9.6	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8 U	3.8	9.6	5
10138	1-Methylnaphthalene	90-12-0	3.8 U	3.8	9.6	5
10138	2-Methylnaphthalene	91-57-6	3.8 U	3.8	9.6	5
10138	Naphthalene	91-20-3	3.8 U	3.8	9.6	5
10138	N-Nitrosodimethylamine	62-75-9	3.8 U	3.8	9.6	5
10138	Phenanthrene	85-01-8	4.8 J	3.8	9.6	5
10138	Pyrene	129-00-0	6.1 J	3.8	9.6	5

Reporting limits were raised due to interference from the sample matrix.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.7 J	1.4	4.2
10401	Dalapon	75-99-0	5.1 U	5.1	10
10401	2,4-DB	94-82-6	0.72 U	0.72	2.0
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4
10401	Dinoseb	88-85-7	0.92 U	0.92	2.8
10401	2,4-DP (Dichlorprop)	120-36-5	0.92 U	0.92	2.0
10401	MCPA	94-74-6	230 J	88	290
10401	MCPP (Mecoprop)	93-65-2	87 U	87	290

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	0.095 U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.22	0.087	0.20		1
The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076 U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19		1
01363	Chlordane	57-74-9	1.2 J	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.14 J	0.076	0.39		1
01363	p,p-DDT	50-29-3	0.28 J	0.076	0.39		1
01363	Delta BHC	319-86-8	0.042 U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.076 U	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39		1
01363	Endrin	72-20-8	0.076 U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.17 J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9		1
01363	Mirex	2385-85-5	0.095 U	0.095	0.39		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. the original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate recoveries are low for the reextract. DDE, DDT, endrin aldehyde and chlordane are not detected in the reextract.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.2 U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2 U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	3.4 J	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38 U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.38 U	0.38	2.0	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.38 U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	2.0		1
10225	PCB-1260	11096-82-5	1.4 J	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	2.0		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	34,200	5.65	22.4		1
07914	Boron	7440-42-8	2.42 J	0.999	5.61		1
01650	Calcium	7440-70-2	7,210	6.88	22.4		1
01654	Iron	7439-89-6	33,900	10.6	44.9		2
01656	Lithium	7439-93-2	28.1	0.25	2.2		1
01657	Magnesium	7439-95-4	7,510	2.85	11.2		1
06958	Manganese	7439-96-5	466	0.0875	0.561		1
10145	Phosphorus	7723-14-0	335	0.629	11.2		1
01662	Potassium	7440-09-7	5,180	20.2	56.1		1
01667	Sodium	7440-23-5	138	41.9	112		1
07968	Strontium	7440-24-6	41.5	0.0696	0.561		1
06969	Tin	7440-31-5	3.06 J	1.12	11.2		1
06970	Titanium	7440-32-6	1,660	0.427	1.12		1
10146	Zirconium	7440-67-7	7.02	0.943	5.61		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.386	0.0673	0.224		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.16	0.0898	0.449		2
06126	Barium	7440-39-3	133	0.121	0.449		2
06127	Beryllium	7440-41-7	1.09	0.0180	0.112		2
06128	Cadmium	7440-43-9	0.491	0.0449	0.112		2
06131	Chromium	7440-47-3	30.3	0.135	0.449		2
06132	Cobalt	7440-48-4	9.27	0.0224	0.112		2
06133	Copper	7440-50-8	23.4	0.0741	0.449		2
06135	Lead	7439-92-1	16.6	0.0117	0.224		2
06138	Molybdenum	7439-98-7	0.649	0.0561	0.112		2
06139	Nickel	7440-02-0	29.8	0.112	0.449		2
06141	Selenium	7782-49-2	0.216 J	0.0449	0.449		2
06142	Silver	7440-22-4	0.0774 J	0.0135	0.112		2
06145	Thallium	7440-28-0	0.506	0.0337	0.112		2
06148	Vanadium	7440-62-2	97.1	0.0247	0.112		2
06149	Zinc	7440-66-6	140	0.629	3.37		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0038 J	0.0031	0.110		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 300.0							
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9	0.92	1.2	mg/kg	1
EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.7	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.53 J	0.23	1.2	mg/kg	1
SW-846 9045C modified							
00394	18a pH by 9045C	n.a.	7.74	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	Moisture Content by 160.3	n.a.	13.5	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 17:51	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 17:59	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 13:55	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 11:40	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:51	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL052 SDG#: DE159-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 09:05	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:55	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:55	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:55	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:02	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:46	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:12	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:22	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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REVISED

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL052 SDG#: DE159-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

REVISED

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	560		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U 190	560		1
04688	Benzyl alcohol	100-51-6	190	U 190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U 37	190		1
04688	4-Chloroaniline	106-47-8	74	U 74	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U 37	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U 110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U 37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U 37	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	560		1
04688	2,4-Dinitrophenol	51-28-5	370	U 370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U 37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	370		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	74	U 74	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	560		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	37	U 37	190		1
04688	4-Methylphenol	106-44-5	37	U 37	190		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	37	U 37	190		1
04688	4-Nitroaniline	100-01-6	74	U 74	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	560		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U 37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U 37	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.7	U 3.7	9.2	5
10138	Acenaphthylene	208-96-8	1.8	U 1.8	9.2	5
10138	Anthracene	120-12-7	2.2	J 1.8	9.2	5
10138	Benzo(a)anthracene	56-55-3	5.9	J 3.7	9.2	5
10138	Benzo(a)pyrene	50-32-8	9.2	J 3.7	9.2	5
10138	Benzo(b)fluoranthene	205-99-2	34	3.7	9.2	5
10138	Benzo(g,h,i)perylene	191-24-2	6.3	J 3.7	9.2	5
10138	Benzo(k)fluoranthene	207-08-9	3.7	U 3.7	9.2	5
10138	Chrysene	218-01-9	15	1.8	9.2	5
10138	Dibenz(a,h)anthracene	53-70-3	3.7	U 3.7	9.2	5
10138	Fluoranthene	206-44-0	30	3.7	9.2	5
10138	Fluorene	86-73-7	3.7	U 3.7	9.2	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	4.5	J 3.7	9.2	5
10138	1-Methylnaphthalene	90-12-0	3.7	U 3.7	9.2	5
10138	2-Methylnaphthalene	91-57-6	3.7	U 3.7	9.2	5
10138	Naphthalene	91-20-3	3.7	U 3.7	9.2	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U 3.7	9.2	5
10138	Phenanthrene	85-01-8	18	3.7	9.2	5
10138	Pyrene	129-00-0	19	3.7	9.2	5

Reporting limits were raised due to interference from the sample matrix.

Herbicides	SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg
10401	2,4-D	94-75-7	1.3	U 1.3	4.0
10401	Dalapon	75-99-0	4.9	U 4.9	10
10401	2,4-DB	94-82-6	0.70	U 0.70	1.9
10401	Dicamba	1918-00-9	0.45	U 0.45	1.3
10401	Dinoseb	88-85-7	0.90	U 0.90	2.7
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U 0.90	1.9
10401	MCPA	94-74-6	85	U 85	280
10401	MCPP (Mecoprop)	93-65-2	84	U 84	280

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	0.092 U	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.12 J	0.084	0.19		1
The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.074 U	0.074	0.19		1
01363	Alpha BHC	319-84-6	0.038 U	0.038	0.19		1
01363	Beta BHC	319-85-7	0.067 U	0.067	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.038 U	0.038	0.19		1
01363	Chlordane	57-74-9	1.5 U	1.5	3.8		1
01363	p,p-DDD	72-54-8	0.074 U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.10 U	0.10	0.38		1
01363	p,p-DDT	50-29-3	0.95	0.074	0.38		1
01363	Delta BHC	319-86-8	0.040 U	0.040	0.19		1
01363	Dieldrin	60-57-1	0.15 U	0.15	0.38		1
01363	Endosulfan I	959-98-8	0.049 U	0.049	0.19		1
01363	Endosulfan II	33213-65-9	0.089 U	0.089	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074 U	0.074	0.38		1
01363	Endrin	72-20-8	0.074 U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074 U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.074 U	0.074	0.38		1
01363	Heptachlor	76-44-8	0.067 U	0.067	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.038 U	0.038	0.19		1
01363	Methoxychlor	72-43-5	0.38 U	0.38	1.9		1
01363	Mirex	2385-85-5	0.12 U	0.12	0.38		1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.4		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar results are observed for both. The original data is reported.

The surrogate recovery for the reextract is low.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	1.1 U	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37 U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.37 U	0.37	1.9	1

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Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	0.37 U	0.37	1.9		1
10225	PCB-1242	53469-21-9	0.37 U	0.37	1.9		1
10225	PCB-1248	12672-29-6	0.37 U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37 U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.44 U	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.37 U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37 U	0.37	1.9		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	24,200	5.60	22.2		1
07914	Boron	7440-42-8	0.990 U	0.990	5.56		1
01650	Calcium	7440-70-2	9,360	6.82	22.2		1
01654	Iron	7439-89-6	29,800	5.24	22.2		1
01656	Lithium	7439-93-2	19.4	0.24	2.2		1
01657	Magnesium	7439-95-4	5,310	2.83	11.1		1
06958	Manganese	7439-96-5	538	0.0868	0.556		1
10145	Phosphorus	7723-14-0	445	0.623	11.1		1
01662	Potassium	7440-09-7	4,050	20.0	55.6		1
01667	Sodium	7440-23-5	129	41.5	111		1
07968	Strontium	7440-24-6	37.8	0.0690	0.556		1
06969	Tin	7440-31-5	2.88 J	1.11	11.1		1
06970	Titanium	7440-32-6	1,450	0.423	1.11		1
10146	Zirconium	7440-67-7	5.62	0.934	5.56		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.351	0.0655	0.218		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.65	0.0873	0.436		2
06126	Barium	7440-39-3	187	0.118	0.436		2
06127	Beryllium	7440-41-7	0.913	0.0175	0.109		2
06128	Cadmium	7440-43-9	0.461	0.0436	0.109		2
06131	Chromium	7440-47-3	26.4	0.131	0.436		2
06132	Cobalt	7440-48-4	10.6	0.0218	0.109		2
06133	Copper	7440-50-8	20.4	0.0720	0.436		2
06135	Lead	7439-92-1	16.9	0.0113	0.218		2
06138	Molybdenum	7439-98-7	0.907	0.0545	0.109		2
06139	Nickel	7440-02-0	24.7	0.109	0.436		2
06141	Selenium	7782-49-2	0.155 J	0.0436	0.436		2
06142	Silver	7440-22-4	0.0515 J	0.0131	0.109		2
06145	Thallium	7440-28-0	0.425	0.0327	0.109		2
06148	Vanadium	7440-62-2	82.1	0.0240	0.109		2
06149	Zinc	7440-66-6	108	0.611	3.27		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0043 J	0.0032	0.112		1

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Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry EPA 300.0							
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.7	0.90	1.1	mg/kg	1
EPA 314.0							
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.7	ug/kg	1
SW-846 7199							
05892	3a Cr VI by EPA 7199	18540-29-9	0.43 J	0.22	1.1	mg/kg	1
SW-846 9045C modified							
00394	18a pH by 9045C	n.a.	7.78	0.0100	0.0100	Std. Units	1
Wet Chemistry EPA 160.3 modified							
11624	Moisture Content by 160.3	n.a.	11.0	0.50	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 18:17	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 18:30	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 14:22	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 12:07	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:09	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1

*=This limit was used in the evaluation of the final result

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Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SL053 SDG#: DE159-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:58	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:58	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:05	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:00	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:34	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:33	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SL053 SDG#: DE159-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Page 1 of 9

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

REVISED
LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/kg	ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	19.2 U	19.2	38.4		1
GC/MS	Semivolatiles SW-846 8270C		ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U 190	580		1
04688	Benzidine	92-87-5	1,300	U 1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U 190	580		1
04688	Benzyl alcohol	100-51-6	190	U 190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U 19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U 19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U 19	190		1
04688	Carbazole	86-74-8	19	U 19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U 38	190		1
04688	4-Chloroaniline	106-47-8	77	U 77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U 19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U 19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U 19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U 19	190		1
04688	2-Chlorophenol	95-57-8	19	U 19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U 38	190		1
04688	Dibenzofuran	132-64-9	19	U 19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U 19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U 19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U 19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U 120	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U 19	190		1
04688	Diethylphthalate	84-66-2	19	U 19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U 38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U 38	190		1
04688	Dimethylphthalate	131-11-3	19	U 19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U 190	580		1
04688	2,4-Dinitrophenol	51-28-5	380	U 380	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	38	U 38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U 19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U 19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U 19	380		1
04688	Hexachlorobenzene	118-74-1	19	U 19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U 77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U 190	580		1
04688	Hexachloroethane	67-72-1	19	U 19	190		1
04688	Isophorone	78-59-1	19	U 19	190		1
04688	2-Methylphenol	95-48-7	38	U 38	190		1
04688	4-Methylphenol	106-44-5	38	U 38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U 19	190		1
04688	3-Nitroaniline	99-09-2	38	U 38	190		1
04688	4-Nitroaniline	100-01-6	77	U 77	190		1
04688	Nitrobenzene	98-95-3	19	U 19	190		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	2-Nitrophenol	88-75-5	19	U 19	190		1
04688	4-Nitrophenol	100-02-7	190	U 190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U 19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U 19	190		1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U 19	190		1
04688	Pentachlorophenol	87-86-5	190	U 190	580		1
04688	Phenol	108-95-2	19	U 19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U 19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U 38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U 38	190		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

2-nitrophenol
4-bromophenyl-phenylether
hexachlorobenzene
hexachlorobutadiene

GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg
10138	Acenaphthene	83-32-9	3.8	U 3.8	9.5	5
10138	Acenaphthylene	208-96-8	1.9	U 1.9	9.5	5
10138	Anthracene	120-12-7	1.9	U 1.9	9.5	5
10138	Benzo(a)anthracene	56-55-3	3.8	U 3.8	9.5	5
10138	Benzo(a)pyrene	50-32-8	5.7	J 3.8	9.5	5
10138	Benzo(b)fluoranthene	205-99-2	5.1	J 3.8	9.5	5
10138	Benzo(g,h,i)perylene	191-24-2	4.1	J 3.8	9.5	5
10138	Benzo(k)fluoranthene	207-08-9	11	3.8	9.5	5
10138	Chrysene	218-01-9	6.9	J 1.9	9.5	5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U 3.8	9.5	5
10138	Fluoranthene	206-44-0	16	3.8	9.5	5
10138	Fluorene	86-73-7	3.8	U 3.8	9.5	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U 3.8	9.5	5
10138	1-Methylnaphthalene	90-12-0	3.8	U 3.8	9.5	5
10138	2-Methylnaphthalene	91-57-6	3.8	U 3.8	9.5	5
10138	Naphthalene	91-20-3	3.8	U 3.8	9.5	5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U 3.8	9.5	5
10138	Phenanthrene	85-01-8	11	3.8	9.5	5
10138	Pyrene	129-00-0	11	3.8	9.5	5

Reporting limits were raised due to interference from the sample matrix.

Explosives	SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U 68	140
					1000000 0
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U 45	140
					1000000 0

*=This limit was used in the evaluation of the final result

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Analysis Report

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Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/kg	ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90 U	90	270	1000000 0	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90 U	90	270	1000000 0	1
10132	1,3-Dinitrobenzene	99-65-0	45 U	45	140	1000000 0	1
10132	2,4-Dinitrotoluene	121-14-2	45 U	45	140	1000000 0	1
10132	2,6-Dinitrotoluene	606-20-2	45 U	45	140	1000000 0	1
10132	HMX	2691-41-0	110 U	110	340	1000000 0	1
10132	Nitrobenzene	98-95-3	45 U	45	140	1000000 0	1
10132	Nitroglycerin	55-63-0	900 U	900	2,700	1000000 0	1
10132	2-Nitrotoluene	88-72-2	90 U	90	140	1000000 0	1
10132	3-Nitrotoluene	99-08-1	110 U	110	140	1000000 0	1
10132	4-Nitrotoluene	99-99-0	90 U	90	140	1000000 0	1
10132	PETN	78-11-5	900 U	900	2,700	1000000 0	1
10132	RDX	121-82-4	56 U	56	140	1000000 0	1
10132	Tetryl	479-45-8	69 U	69	140	1000000 0	1
10132	1,3,5-Trinitrobenzene	99-35-4	45 U	45	140	1000000 0	1
10132	2,4,6-Trinitrotoluene	118-96-7	45 U	45	140	1000000 0	1
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4 U	1.4	4.1		1
10401	Dalapon	75-99-0	5.1 U	5.1	10		1
10401	2,4-DB	94-82-6	0.71 U	0.71	2.0		1
10401	Dicamba	1918-00-9	0.46 U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92 U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92 U	0.92	2.0		1
10401	MCPA	94-74-6	99 U	99	290		1
10401	MCPP (Mecoprop)	93-65-2	86 U	86	290		1
10401	2,4,5-T	93-76-5	0.094 U	0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.16 J	0.086	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable. Despite florisisil cleanup, our usual reporting limits were not attained.

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Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics SW-846 8315A							
04173	25a Formaldehyde 8315A	50-00-0	690 U	690	1,700	ug/kg	1
The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Perchlorate SW-846 6850 1/2007							
06557	6a Perchlorate EPA 6850	14797-73-0	2.4 U	2.4	5.8	ug/kg	1
Pesticides/PCBs SW-846 8081A							
01363	Aldrin	309-00-2	0.076 U	0.076	0.19	ug/kg	1
01363	Alpha BHC	319-84-6	0.039 U	0.039	0.19	ug/kg	1
01363	Beta BHC	319-85-7	0.069 U	0.069	0.19	ug/kg	1
01363	Gamma BHC - Lindane	58-89-9	0.039 U	0.039	0.19	ug/kg	1
01363	Chlordane	57-74-9	2.6 U	2.6	3.9	ug/kg	1
01363	p,p-DDD	72-54-8	0.076 U	0.076	0.39	ug/kg	1
01363	p,p-DDE	72-55-9	0.13 U	0.13	0.39	ug/kg	1
01363	p,p-DDT	50-29-3	0.65 U	0.076	0.39	ug/kg	1
01363	Delta BHC	319-86-8	0.041 U	0.041	0.19	ug/kg	1
01363	Dieldrin	60-57-1	0.097 U	0.097	0.39	ug/kg	1
01363	Endosulfan I	959-98-8	0.051 U	0.051	0.19	ug/kg	1
01363	Endosulfan II	33213-65-9	0.076 U	0.076	0.39	ug/kg	1
01363	Endosulfan Sulfate	1031-07-8	0.076 U	0.076	0.39	ug/kg	1
01363	Endrin	72-20-8	0.076 U	0.076	0.39	ug/kg	1
01363	Endrin Aldehyde	7421-93-4	0.076 U	0.076	0.39	ug/kg	1
01363	Endrin Ketone	53494-70-5	0.076 U	0.076	0.39	ug/kg	1
01363	Heptachlor	76-44-8	0.069 U	0.069	0.19	ug/kg	1
01363	Heptachlor Epoxide	1024-57-3	0.039 U	0.039	0.19	ug/kg	1
01363	Methoxychlor	72-43-5	0.39 U	0.39	1.9	ug/kg	1
01363	Mirex	2385-85-5	0.13 U	0.13	0.39	ug/kg	1
01363	Toxaphene	8001-35-2	2.5 U	2.5	7.6	ug/kg	1
The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar results are observed for both. The original data is reported.							
The surrogate recovery for the reextract is low.							
Reporting limits were raised due to interference from the sample matrix.							
Pesticides/PCBs SW-846 8082							
10225	Aroclor 5432	63496-31-1	1.1 U	1.1	3.8	ug/kg	1
10225	Aroclor 5442	12642-23-8	1.1 U	1.1	3.8	ug/kg	1

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Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5460	11126-42-4	1.9 J	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38 U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38 U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38 U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38 U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38 U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38 U	0.38	1.9		1
10225	PCB-1260	11096-82-5	2.3	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38 U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38 U	0.38	1.9		1
GC Miscellaneous		SW-846 8015B	ug/kg	ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120 U	120	580		1
10501	Isopropanol	67-63-0	120 U	120	580		1
10501	Methanol	67-56-1	120 U	120	580		1
GC Miscellaneous		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.8 U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8 U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8 U	5.8	12		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/kg	mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7 U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7 U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7 U	1.7	4.0		1
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/kg	mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	5.6 J	4.6	14		10
10199	EFH (C15-C20)	n.a.	30	4.6	14		10
10199	EFH (C21-C30)	n.a.	81	4.6	14		10
10199	EFH (C30 - C40)	n.a.	250	4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6 U	4.6	14		10
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	29,900	5.79	23.0		1
07914	Boron	7440-42-8	2.14 J	1.02	5.75		1
01650	Calcium	7440-70-2	9,310	7.05	23.0		1
01654	Iron	7439-89-6	31,500	10.8	46.0		2
01656	Lithium	7439-93-2	26.0	0.25	2.3		1
01657	Magnesium	7439-95-4	6,720	2.92	11.5		1
06958	Manganese	7439-96-5	427	0.0898	0.575		1
10145	Phosphorus	7723-14-0	333	0.644	11.5		1
01662	Potassium	7440-09-7	4,320	20.7	57.5		1
01667	Sodium	7440-23-5	139	42.9	115		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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REVISED

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
SW-846 6010B			mg/kg	mg/kg	mg/kg	mg/kg	
07968	Strontium	7440-24-6	38.0	0.0713	0.575		1
06969	Tin	7440-31-5	3.12 J	1.15	11.5		1
06970	Titanium	7440-32-6	1,590	0.437	1.15		1
10146	Zirconium	7440-67-7	6.81	0.967	5.75		1
SW-846 6020			mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.457	0.0684	0.228		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.68	0.0911	0.456		2
06126	Barium	7440-39-3	145	0.308	1.14		5
06127	Beryllium	7440-41-7	1.07	0.0182	0.114		2
06128	Cadmium	7440-43-9	0.573	0.0456	0.114		2
06131	Chromium	7440-47-3	29.7	0.137	0.456		2
06132	Cobalt	7440-48-4	9.39	0.0228	0.114		2
06133	Copper	7440-50-8	25.7	0.0752	0.456		2
06135	Lead	7439-92-1	22.5	0.0118	0.228		2
06138	Molybdenum	7439-98-7	1.32	0.0570	0.114		2
06139	Nickel	7440-02-0	30.8	0.114	0.456		2
06141	Selenium	7782-49-2	0.210 J	0.0456	0.456		2
06142	Silver	7440-22-4	0.0939 J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.494	0.0342	0.114		2
06148	Vanadium	7440-62-2	102	0.0251	0.114		2
06149	Zinc	7440-66-6	195	1.60	8.55		5
SW-846 7471A			mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0303 J	0.0031	0.109		1
EPA 300.0			mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.7	0.92	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2 J	0.92	1.7		1
EPA 314.0			ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.5		1
SW-846 7199			mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	1.0 J	0.23	1.2		1
SW-846 9012B			mg/kg	mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.56		1
SW-846 9045C modified			Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.05	0.0100	0.0100		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.

Submitted: 05/24/2011 09:40

14420 Albemarle Point Place

Reported: 11/04/2011 11:53

Suite 210

Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		EPA 160.3 modified		%	%	%	%
11624	Moisture Content by 160.3	n.a.	13.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:48	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 18:44	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/09/2011 15:14	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 06:40	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 10:19	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 14:50	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:17	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 12:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:28	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 23:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:57	Dustin A Underkoffler	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

DUP05 SDG#: DE159-17FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 22:22	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 20:38	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:52	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:19	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:35	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:35	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:41	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:41	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:19	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:54	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:14	Ashley M Adams	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

DUP05 SDG#: DE159-17FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	06/01/2011 00:14	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:56	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 18:50	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:44	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

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Analysis Report

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Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.

Submitted: 05/24/2011 09:40

14420 Albemarle Point Place

Reported: 11/04/2011 11:53

Suite 210

Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles EPA 1625C		ng/l	ng/l	ng/l	ng/l	
10962	N-Nitrosodimethylamine	62-75-9	2.07	0.493	0.985		1
GC/MS	Semivolatiles SW-846 8270C		ug/l	ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1 U	1	5		1
04678	Benzidine	92-87-5	20 U	20	59		1
04678	Benzoic acid	65-85-0	6 U	6	15		1
04678	Benzyl alcohol	100-51-6	5 U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1 U	1	5		1
04678	Carbazole	86-74-8	1 U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1 U	1	5		1
04678	4-Chloroaniline	106-47-8	1 U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1 U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1 U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1 U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2 U	2	5		1
04678	2-Chlorophenol	95-57-8	1 U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2 U	2	5		1
04678	Dibenzofuran	132-64-9	1 U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1 U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1 U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1 U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2 U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1 U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3 U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3 U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5 U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10 U	10	29		1
04678	2,4-Dinitrotoluene	121-14-2	1 U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1 U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1 U	1	5		1
04678	Hexachlorobenzene	118-74-1	1 U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1 U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5 U	5	15		1
04678	Hexachloroethane	67-72-1	1 U	1	5		1
04678	Isophorone	78-59-1	1 U	1	5		1
04678	2-Methylphenol	95-48-7	1 U	1	5		1
04678	4-Methylphenol	106-44-5	2 U	2	5		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1 U	1	5		1
04678	3-Nitroaniline	99-09-2	1 U	1	5		1
04678	4-Nitroaniline	100-01-6	1 U	1	5		1
04678	Nitrobenzene	98-95-3	1 U	1	5		1
04678	2-Nitrophenol	88-75-5	1 U	1	5		1
04678	4-Nitrophenol	100-02-7	10 U	10	29		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2 U	2	5		1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

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Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l	ug/l	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3 U	3	15		1
04678	Phenol	108-95-2	1 U	1	5		1
04678	1,2,4-Trichlorobenzene	120-82-1	1 U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1 U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1 U	1	5		1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.0098 U	0.0098	0.049		1
10137	Acenaphthylene	208-96-8	0.0098 U	0.0098	0.049		1
10137	Anthracene	120-12-7	0.0098 U	0.0098	0.049		1
10137	Benzo(a)anthracene	56-55-3	0.0098 U	0.0098	0.049		1
10137	Benzo(a)pyrene	50-32-8	0.0098 U	0.0098	0.049		1
10137	Benzo(b)fluoranthene	205-99-2	0.0098 U	0.0098	0.049		1
10137	Benzo(g,h,i)perylene	191-24-2	0.0098 U	0.0098	0.049		1
10137	Benzo(k)fluoranthene	207-08-9	0.0098 U	0.0098	0.049		1
10137	Butylbenzylphthalate	85-68-7	0.073 J	0.049	0.98		1
10137	Di-n-butylphthalate	84-74-2	0.13 J	0.049	0.98		1
10137	Chrysene	218-01-9	0.0098 U	0.0098	0.049		1
10137	Dibenz(a,h)anthracene	53-70-3	0.0098 U	0.0098	0.049		1
10137	Diethylphthalate	84-66-2	0.049 U	0.049	0.98		1
10137	Dimethylphthalate	131-11-3	0.049 U	0.049	0.98		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.21 J	0.049	0.98		1
10137	Fluoranthene	206-44-0	0.0098 U	0.0098	0.049		1
10137	Fluorene	86-73-7	0.0098 U	0.0098	0.049		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.0098 U	0.0098	0.049		1
10137	1-Methylnaphthalene	90-12-0	0.034 J	0.0098	0.049		1
10137	2-Methylnaphthalene	91-57-6	0.034 J	0.0098	0.049		1
10137	Naphthalene	91-20-3	0.23	0.029	0.049		1
10137	N-Nitrosodimethylamine	62-75-9	0.0098 U	0.0098	0.049		1
10137	Di-n-octylphthalate	117-84-0	0.049 U	0.049	0.98		1
10137	Phenanthrene	85-01-8	0.0098 U	0.0098	0.049		1
10137	Pyrene	129-00-0	0.0098 U	0.0098	0.049		1
Explosives		SW-846 8330A	ug/l	ug/l	ug/l	ug/l	
10131	4-Amino-2,6-Dinitrotoluene	19406-51-0	0.30 U	0.30	0.60	1000000 0	1
10131	2-Amino-4,6-Dinitrotoluene	35572-78-2	0.20 U	0.20	0.60	1000000 0	1
10131	2,6-Diamino-4-nitrotoluene	59229-75-3	0.20 U	0.20	0.60	1000000 0	1
10131	2,4-Diamino-6-nitrotoluene	6629-29-4	0.20 U	0.20	0.60	1000000 0	1
10131	1,3-Dinitrobenzene	99-65-0	0.20 U	0.20	0.60	1000000 0	1
10131	2,4-Dinitrotoluene	121-14-2	0.20 U	0.20	0.60	1000000 0	1

*=This limit was used in the evaluation of the final result

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Analysis Report

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REVISED

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Explosives		SW-846 8330A	ug/l		ug/l	ug/l	ug/l	
10131	2,6-Dinitrotoluene	606-20-2	0.20	U	0.20	0.60	1000000 0	1
10131	HMX	2691-41-0	0.65	U	0.65	2.0	1000000 0	1
10131	Nitrobenzene	98-95-3	0.20	U	0.20	0.60	1000000 0	1
10131	Nitroglycerin	55-63-0	5.2	U	5.2	15	1000000 0	1
10131	2-Nitrotoluene	88-72-2	0.20	U	0.20	0.60	1000000 0	1
10131	3-Nitrotoluene	99-08-1	0.40	U	0.40	1.2	1000000 0	1
10131	4-Nitrotoluene	99-99-0	0.60	U	0.60	1.2	1000000 0	1
10131	PETN	78-11-5	6.0	U	6.0	18	1000000 0	1
10131	RDX	121-82-4	0.20	U	0.20	0.60	1000000 0	1
10131	Tetryl	479-45-8	0.40	U	0.40	0.60	1000000 0	1
10131	1,3,5-Trinitrobenzene	99-35-4	0.20	U	0.20	0.60	1000000 0	1
10131	2,4,6-Trinitrotoluene	118-96-7	0.20	U	0.20	0.60	1000000 0	1
Herbicides		SW-846 8151A	ug/l		ug/l	ug/l	ug/l	
10407	2,4-D	94-75-7	0.16	U	0.16	0.49		1
10407	Dalapon	75-99-0	0.25	U	0.25	1.2		1
10407	2,4-DB	94-82-6	0.30	U	0.30	0.98		1
10407	Dicamba	1918-00-9	0.079	U	0.079	0.30		1
10407	Dinoseb	88-85-7	0.098	U	0.098	0.49		1
10407	2,4-DP (Dichlorprop)	120-36-5	0.16	U	0.16	0.49		1
10407	MCPA	94-74-6	300	U	300	980		1
10407	MCPP	93-65-2	49	U	49	200		1
10407	2,4,5-T	93-76-5	0.015	U	0.015	0.049		1
10407	2,4,5-TP	93-72-1	0.0098	U	0.0098	0.049		1
HPLC Organics		SW-846 8315A	ug/l		ug/l	ug/l	ug/l	
04144	25b Formaldehyde 8315A	50-00-0	10	U	10	50		1
The LCS/LCSD recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.								
Pesticides/PCBs		SW-846 8081A	ug/l		ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0020	U	0.0020	0.0098		1
00177	Alpha BHC	319-84-6	0.0029	U	0.0029	0.0098		1
00177	Beta BHC	319-85-7	0.0028	U	0.0028	0.0098		1
00177	Gamma BHC - Lindane	58-89-9	0.0020	U	0.0020	0.0098		1

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Analysis Report

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Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8081A	ug/l	ug/l	ug/l	ug/l	
00177	Chlordane	57-74-9	0.12 U	0.12	0.49		1
00177	p,p-DDD	72-54-8	0.0049 U	0.0049	0.020		1
00177	p,p-DDE	72-55-9	0.0049 U	0.0049	0.020		1
00177	p,p-DDT	50-29-3	0.0049 U	0.0049	0.020		1
00177	Delta BHC	319-86-8	0.0028 U	0.0028	0.0098		1
00177	Dieldrin	60-57-1	0.0052 U	0.0052	0.020		1
00177	Endosulfan I	959-98-8	0.0042 U	0.0042	0.0098		1
00177	Endosulfan II	33213-65-9	0.015 U	0.015	0.020		1
00177	Endosulfan Sulfate	1031-07-8	0.0057 U	0.0057	0.020		1
00177	Endrin	72-20-8	0.0079 U	0.0079	0.020		1
00177	Endrin Aldehyde	7421-93-4	0.020 U	0.020	0.098		1
00177	Endrin Ketone	53494-70-5	0.0049 U	0.0049	0.020		1
00177	Heptachlor	76-44-8	0.0025 U	0.0025	0.0098		1
00177	Heptachlor Epoxide	1024-57-3	0.0022 U	0.0022	0.0098		1
00177	Methoxychlor	72-43-5	0.029 U	0.029	0.098		1
00177	Mirex	2385-85-5	0.083 U	0.083	0.24		1
00177	Toxaphene	8001-35-2	0.98 U	0.98	2.9		1
Pesticides/PCBs		SW-846 8082	ug/l	ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.098 U	0.098	0.49		1
10227	Aroclor 5442	12642-23-8	0.098 U	0.098	0.49		1
10227	Aroclor 5460	11126-42-4	0.098 U	0.098	0.49		1
10227	PCB-1016	12674-11-2	0.098 U	0.098	0.49		1
10227	PCB-1221	11104-28-2	0.098 U	0.098	0.49		1
10227	PCB-1232	11141-16-5	0.20 U	0.20	0.49		1
10227	PCB-1242	53469-21-9	0.098 U	0.098	0.49		1
10227	PCB-1248	12672-29-6	0.098 U	0.098	0.49		1
10227	PCB-1254	11097-69-1	0.098 U	0.098	0.49		1
10227	PCB-1260	11096-82-5	0.15 U	0.15	0.49		1
10227	PCB-1262	37324-23-5	0.20 U	0.20	0.49		1
10227	PCB-1268	11100-14-4	0.16 U	0.16	0.49		1
GC Petroleum Hydrocarbons		SW-846 8015B	mg/l	mg/l	mg/l	mg/l	
10319	m-Terphenyl	92-06-8	0.078 U	0.078	0.24		1
10319	o-Terphenyl	84-15-1	0.078 U	0.078	0.24		1
10319	p-Terphenyl	92-94-4	0.078 U	0.078	0.24		1
The surrogate data is outside the QC limits. Due to insufficient sample volume, a repeat analysis could not be performed to confirm the results.							
GC Petroleum Hydrocarbons		SW-846 8015B modified	mg/l	mg/l	mg/l	mg/l	
10365	EFH (C12-C14)	n.a.	0.097 U	0.097	0.58		1
10365	EFH (C15-C20)	n.a.	0.097 U	0.097	0.58		1
10365	EFH (C21-C30)	n.a.	0.097 U	0.097	0.58		1
10365	EFH (C30 - C40)	n.a.	0.097 U	0.097	0.58		1
10365	EFH (C8-C11)	n.a.	0.097 U	0.097	0.58		1

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Analysis Report

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Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
		SW-846 6020	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00053 U	0.00053	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
		SW-846 7470A	mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000046 U	0.000046	0.00020		1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
		EPA 314.0	ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
		SW-846 7199	ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1
		SW-846 9012B	mg/l	mg/l	mg/l	mg/l	
08255	17b Cyanide by 9012B	57-12-5	0.0050 U	0.0050	0.010		1

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Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry			Std. Units	Std. Units	Std. Units	Std. Units	
00200	18b pH by 9040B	n.a.	5.4	0.010	0.010		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	15b NDMA by 1625C	EPA 1625C	1	11144WAA026	05/25/2011 19:09	Gregory J Drahovsky	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	11146WAD026	06/06/2011 00:06	Linda M Hartenstine	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11144WAK026	05/26/2011 13:29	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	11146WAD026	05/26/2011 16:00	Timothy J Attenberger	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	11144WAK026	05/25/2011 09:50	Catherine R Wiker	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11144WAA026	05/24/2011 13:25	Wanda F Oswald	1
10131	16b Energetics by 8330A	SW-846 8330A	1	111580002A	06/09/2011 00:05	Michele D Hamilton	1
04144	25b Formaldehyde 8315A	SW-846 8315A	1	111440027A	05/27/2011 00:09	Michele D Hamilton	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	111450014A	05/27/2011 00:36	Michele D Hamilton	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	111460040A	06/03/2011 06:26	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	111460041A	05/28/2011 14:10	Richard A Shober	1
11117	PCB Waters Extraction	SW-846 3510C	1	111460041A	05/27/2011 14:00	Kelli M Barto	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	111460040A	05/27/2011 14:00	Kelli M Barto	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	111450014A	05/25/2011 20:00	Elaine F Stoltzfus	1
01013	Formaldehyde Extraction	SW-846 8315A	1	111440027A	05/25/2011 08:30	Denise L Trimby	1
11122	Energetics Extraction	SW-846 8330	2	111580002A	06/07/2011 18:00	Kelli M Barto	1
10319	20b Terphenyls by 8015B	SW-846 8015B	1	111450009A	05/26/2011 19:06	Heather E Williams	1
10365	9b TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111450031A	06/03/2011 01:53	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	111450031A	05/26/2011 08:00	Catherine R Wiker	1
10304	Terphenyls water prep	SW-846 3510C	1	111450009A	05/25/2011 17:30	Kathryn I DeHaven	1
01743	Aluminum	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
08014	Boron	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1

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Analysis Report

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Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

EB-05 SDG#: DE159-18EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01756	Lithium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07058	Manganese	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
10143	Phosphorus	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01762	Potassium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01767	Sodium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
08068	Strontium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07069	Tin	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07070	Titanium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
10144	Zirconium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
06024	Antimony	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06026	Barium	SW-846 6020	1	111446050005D	05/27/2011 17:11	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06033	Copper	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06035	Lead	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	111446050005C	05/27/2011 17:11	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	111446050005B	05/27/2011 17:11	Choon Y Tian	1
06042	Silver	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06045	Thallium	SW-846 6020	2	111536050004A	06/03/2011 06:49	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
00259	Mercury	SW-846 7470A	2	111465713002	05/31/2011 15:11	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	111441848008	05/25/2011 10:52	James L Mertz	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	111446050005	05/25/2011 11:46	James L Mertz	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	2	111536050004	06/02/2011 23:00	Mirit S Shenouda	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	111465713002	05/26/2011 15:20	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	11144196901B	05/25/2011 05:58	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	11154621701A	06/03/2011 15:31	William L Hamaker Jr	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	11143495401B	05/24/2011 11:58	Parker D Lindstrom	1
08255	17b Cyanide by 9012B	SW-846 9012B	1	11146117101B	05/26/2011 19:00	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012B	1	11146117101B	05/26/2011 09:40	Nancy J Shoop	1
00200	18b pH by 9040B	SW-846 9040B	1	11144020001A	05/24/2011 19:50	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	280	U 280	830		1
04688	Benzidine	92-87-5	1,900	U 1,900	5,500		1
04688	Benzoic acid	65-85-0	280	U 280	830		1
04688	Benzyl alcohol	100-51-6	280	U 280	830		1
04688	4-Bromophenyl-phenylether	101-55-3	28	U 28	280		1
04688	Butylbenzylphthalate	85-68-7	28	U 28	280		1
04688	Di-n-butylphthalate	84-74-2	28	U 28	280		1
04688	Carbazole	86-74-8	28	U 28	280		1
04688	4-Chloro-3-methylphenol	59-50-7	55	U 55	280		1
04688	4-Chloroaniline	106-47-8	110	U 110	280		1
04688	bis(2-Chloroethoxy)methane	111-91-1	28	U 28	280		1
04688	bis(2-Chloroethyl)ether	111-44-4	28	U 28	280		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	28	U 28	280		1
04688	2-Chloronaphthalene	91-58-7	28	U 28	280		1
04688	2-Chlorophenol	95-57-8	28	U 28	280		1
04688	4-Chlorophenyl-phenylether	7005-72-3	55	U 55	280		1
04688	Dibenzofuran	132-64-9	28	U 28	280		1
04688	1,2-Dichlorobenzene	95-50-1	28	U 28	280		1
04688	1,3-Dichlorobenzene	541-73-1	28	U 28	280		1
04688	1,4-Dichlorobenzene	106-46-7	28	U 28	280		1
04688	3,3'-Dichlorobenzidine	91-94-1	170	U 170	550		1
04688	2,4-Dichlorophenol	120-83-2	28	U 28	280		1
04688	Diethylphthalate	84-66-2	28	U 28	280		1
04688	2,4-Dimethylphenol	105-67-9	55	U 55	280		1
04688	3,5-Dimethylphenol	108-68-9	55	U 55	280		1
04688	Dimethylphthalate	131-11-3	28	U 28	280		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	280	U 280	830		1
04688	2,4-Dinitrophenol	51-28-5	550	U 550	1,700		1
04688	2,4-Dinitrotoluene	121-14-2	55	U 55	280		1
04688	2,6-Dinitrotoluene	606-20-2	28	U 28	280		1
04688	1,2-Diphenylhydrazine	122-66-7	28	U 28	280		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	28	U 28	550		1
04688	Fluoranthene	206-44-0	53	J 28	280		1
04688	Hexachlorobenzene	118-74-1	28	U 28	280		1
04688	Hexachlorobutadiene	87-68-3	110	U 110	280		1
04688	Hexachlorocyclopentadiene	77-47-4	280	U 280	830		1
04688	Hexachloroethane	67-72-1	28	U 28	280		1
04688	Isophorone	78-59-1	28	U 28	280		1
04688	2-Methylphenol	95-48-7	55	U 55	280		1
04688	4-Methylphenol	106-44-5	55	U 55	280		1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	28	U 28	280		1
04688	3-Nitroaniline	99-09-2	55	U 55	280		1
04688	4-Nitroaniline	100-01-6	110	U 110	280		1
04688	Nitrobenzene	98-95-3	28	U 28	280		1
04688	2-Nitrophenol	88-75-5	28	U 28	280		1
04688	4-Nitrophenol	100-02-7	280	U 280	830		1
04688	N-Nitroso-di-n-propylamine	621-64-7	28	U 28	280		1

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SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 05/24/2011 09:40

Reported: 11/04/2011 11:53

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	ug/kg	
04688	N-Nitrosodiphenylamine	86-30-6	28	U 28	280		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	28	U 28	280		1
04688	Pentachlorophenol	87-86-5	280	U 280	830		1
04688	Phenanthrene	85-01-8	35	J 28	280		1
04688	Phenol	108-95-2	28	U 28	280		1
04688	Pyrene	129-00-0	48	J 28	280		1
04688	1,2,4-Trichlorobenzene	120-82-1	28	U 28	280		1
04688	2,4,5-Trichlorophenol	95-95-4	55	U 55	280		1
04688	2,4,6-Trichlorophenol	88-06-2	55	U 55	280		1
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:							
2-nitrophenol							
4-bromophenyl-phenylether							
hexachlorobenzene							
hexachlorobutadiene							
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	5.5	U 5.5	14		5
10138	Acenaphthylene	208-96-8	2.7	U 2.7	14		5
10138	Anthracene	120-12-7	2.7	U 2.7	14		5
10138	Benzo(a)anthracene	56-55-3	12	J 5.5	14		5
10138	Benzo(a)pyrene	50-32-8	18	5.5	14		5
10138	Benzo(b)fluoranthene	205-99-2	33	5.5	14		5
10138	Benzo(g,h,i)perylene	191-24-2	10	J 5.5	14		5
10138	Benzo(k)fluoranthene	207-08-9	9.4	J 5.5	14		5
10138	Chrysene	218-01-9	20	2.7	14		5
10138	Dibenz(a,h)anthracene	53-70-3	5.5	U 5.5	14		5
10138	Fluorene	86-73-7	5.5	U 5.5	14		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	8.7	J 5.5	14		5
10138	1-Methylnaphthalene	90-12-0	5.5	U 5.5	14		5
10138	2-Methylnaphthalene	91-57-6	5.5	U 5.5	14		5
10138	Naphthalene	91-20-3	5.5	U 5.5	14		5
10138	N-Nitrosodimethylamine	62-75-9	5.5	U 5.5	14		5
Reporting limits were raised due to interference from the sample matrix.							
Herbicides	SW-846 8151A		ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	20	U 20	59		10
10401	Dalapon	75-99-0	72	U 72	150		10
10401	2,4-DB	94-82-6	10	U 10	28		10
10401	Dicamba	1918-00-9	6.6	U 6.6	20		10
10401	Dinoseb	88-85-7	13	U 13	40		10
10401	2,4-DP (Dichlorprop)	120-36-5	13	U 13	28		10
10401	MCPA	94-74-6	1,300	U 1,300	4,100		10
10401	MCPP (Mecoprop)	93-65-2	16,000	U 16,000	16,000		10

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SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.

Submitted: 05/24/2011 09:40

14420 Albemarle Point Place

Reported: 11/04/2011 11:53

Suite 210

Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides		SW-846 8151A	ug/kg	ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	1.5 U	1.5	2.8		10
10401	2,4,5-TP	93-72-1	2.0 J	1.2	2.8		10

Reporting limits were raised due to interference from the sample matrix.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCP and 2,4,5-T

Pesticides/PCBs		SW-846 8081A	ug/kg	ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.11 U	0.11	0.27		1
01363	Alpha BHC	319-84-6	0.56 U	0.56	2.7		10
01363	Beta BHC	319-85-7	0.99 U	0.99	2.7		10
01363	Gamma BHC - Lindane	58-89-9	3.2 U	3.2	3.2		10
01363	Chlordane	57-74-9	7.3 U	7.3	7.3		1
01363	p,p-DDD	72-54-8	0.11 U	0.11	0.56		1
01363	p,p-DDE	72-55-9	0.60 U	0.60	0.60		1
01363	p,p-DDT	50-29-3	0.52 J	0.11	0.56		1
01363	Delta BHC	319-86-8	0.60 U	0.60	2.7		10
01363	Dieldrin	60-57-1	0.28 U	0.28	0.56		1
01363	Endosulfan I	959-98-8	0.073 U	0.073	0.27		1
01363	Endosulfan II	33213-65-9	0.11 U	0.11	0.56		1
01363	Endosulfan Sulfate	1031-07-8	0.11 U	0.11	0.56		1
01363	Endrin	72-20-8	0.11 U	0.11	0.56		1
01363	Endrin Aldehyde	7421-93-4	0.11 U	0.11	0.56		1
01363	Endrin Ketone	53494-70-5	0.11 U	0.11	0.56		1
01363	Heptachlor	76-44-8	0.099 U	0.099	0.27		1
01363	Heptachlor Epoxide	1024-57-3	0.056 U	0.056	0.27		1
01363	Methoxychlor	72-43-5	0.56 U	0.56	2.7		1
01363	Mirex	2385-85-5	0.18 U	0.18	0.56		1
01363	Toxaphene	8001-35-2	3.6 U	3.6	11		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar sample results are observed for both.

Reporting limits were raised due to interference from the sample matrix.

The surrogate recovery for the reextract is low.

Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.7 U	1.7	5.5		1
10225	Aroclor 5442	12642-23-8	1.7 U	1.7	5.5		1

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LLI Sample # SW 6296056
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SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs		SW-846 8082	ug/kg	ug/kg	ug/kg	ug/kg	
10225	Aroclor 5460	11126-42-4	3.9 J	1.7	5.5		1
10225	PCB-1016	12674-11-2	0.55 U	0.55	2.8		1
10225	PCB-1221	11104-28-2	0.55 U	0.55	2.8		1
10225	PCB-1232	11141-16-5	0.55 U	0.55	2.8		1
10225	PCB-1242	53469-21-9	0.55 U	0.55	2.8		1
10225	PCB-1248	12672-29-6	6.8	0.55	2.8		1
10225	PCB-1254	11097-69-1	0.55 U	0.55	2.8		1
10225	PCB-1260	11096-82-5	3.2	0.65	2.8		1
10225	PCB-1262	37324-23-5	0.55 U	0.55	2.8		1
10225	PCB-1268	11100-14-4	0.55 U	0.55	2.8		1
Metals		SW-846 6010B	mg/kg	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,600	8.33	33.1		1
07914	Boron	7440-42-8	1.47 U	1.47	8.28		1
01650	Calcium	7440-70-2	11,800	10.1	33.1		1
01654	Iron	7439-89-6	14,800	7.80	33.1		1
01656	Lithium	7439-93-2	15.9	0.36	3.3		1
01657	Magnesium	7439-95-4	3,220	4.21	16.6		1
06958	Manganese	7439-96-5	232	0.129	0.828		1
10145	Phosphorus	7723-14-0	509	0.927	16.6		1
01662	Potassium	7440-09-7	2,260	29.8	82.8		1
01667	Sodium	7440-23-5	161 J	61.8	166		1
07968	Strontium	7440-24-6	37.7	0.103	0.828		1
06969	Tin	7440-31-5	3.38 J	1.66	16.6		1
06970	Titanium	7440-32-6	912	0.629	1.66		1
10146	Zirconium	7440-67-7	2.73 J	1.39	8.28		1
		SW-846 6020	mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.437	0.0974	0.325		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.36	0.130	0.649		2
06126	Barium	7440-39-3	110	0.175	0.649		2
06127	Beryllium	7440-41-7	0.480	0.0260	0.162		2
06128	Cadmium	7440-43-9	0.732	0.0649	0.162		2
06131	Chromium	7440-47-3	15.4	0.195	0.649		2
06132	Cobalt	7440-48-4	3.92	0.0325	0.162		2
06133	Copper	7440-50-8	13.1	0.107	0.649		2
06135	Lead	7439-92-1	21.0	0.0169	0.325		2
06138	Molybdenum	7439-98-7	1.59	0.0812	0.162		2
06139	Nickel	7440-02-0	13.5	0.162	0.649		2
06141	Selenium	7782-49-2	0.220 J	0.0649	0.649		2
06142	Silver	7440-22-4	0.315	0.0195	0.162		2
06145	Thallium	7440-28-0	0.265	0.0487	0.162		2
06148	Vanadium	7440-62-2	34.3	0.0357	0.162		2
06149	Zinc	7440-66-6	209	0.909	4.87		2
		SW-846 7471A	mg/kg	mg/kg	mg/kg	mg/kg	

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SSFL Area IV Collocated Soil Sampling
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SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals							
00159	Mercury	SW-846 7471A 7439-97-6	mg/kg 0.0187 J	mg/kg 0.0047	mg/kg 0.163	mg/kg	1
Wet Chemistry							
07332	11a Anions by 300.0 - Fluoride	EPA 300.0 16984-48-8	mg/kg 2.9	mg/kg 1.3	mg/kg 1.7	mg/kg	1
10147	7a Perchlorate EPA 314.0	EPA 314.0 14797-73-0	ug/kg 14.9 U	ug/kg 14.9	ug/kg 49.7	ug/kg	1
05892	3a Cr VI by EPA 7199	SW-846 7199 18540-29-9	mg/kg 0.33 U	mg/kg 0.33	mg/kg 1.7	mg/kg	1
		SW-846 9045C modified	Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	7.19	0.0100	0.0100		1
Wet Chemistry							
11624	Moisture Content by 160.3	EPA 160.3 modified n.a.	% 39.6	% 0.50	% 0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 19:10	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/09/2011 15:44	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/31/2011 13:33	Michele D Hamilton	10
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 13:02	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 13:15	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:46	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1

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SED35 SDG#: DE159-19*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 01:04	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 01:04	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:06	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 23:18	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:56	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

REVISED

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 05/24/2011 09:40

Suite 210

Reported: 11/04/2011 11:53

Chantilly VA 20151

SED35 SDG#: DE159-19*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	2	11304162401A	10/31/2011 12:13	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B111471AA Sample number(s): 6296035-6296037, 6296039									
Acetone	9.6	6.7	8.0	ug/kg	159	153	32-209	4	30
Benzene	0.10	U	0.10	ug/kg	106	103	80-120	2	30
Bromobenzene	0.13	U	0.13	ug/kg	99	98	79-120	1	30
Bromochloromethane	0.33	U	0.33	ug/kg	106	101	79-124	5	30
Bromodichloromethane	0.08	U	0.08	ug/kg	100	96	78-120	4	30
Bromoform	0.40	U	0.40	ug/kg	94	93	70-120	1	30
Bromomethane	0.25	U	0.25	ug/kg	73	73	32-162	1	30
2-Butanone	1.2	U	1.2	ug/kg	134	124	46-153	8	30
n-Butylbenzene	0.12	U	0.12	ug/kg	102	102	72-120	0	30
sec-Butylbenzene	0.06	U	0.06	ug/kg	103	103	75-120	1	30
tert-Butylbenzene	0.16	U	0.16	ug/kg	102	100	75-120	2	30
Carbon Tetrachloride	0.14	U	0.14	ug/kg	105	99	69-122	6	30
Chlorobenzene	0.11	U	0.11	ug/kg	103	100	80-120	2	30
Chloroethane	0.13	U	0.13	ug/kg	67	67	37-154	0	30
2-Chloroethyl Vinyl Ether	0.30	U	0.30	ug/kg	95	91	43-146	5	30
Chloroform	0.12	U	0.12	ug/kg	107	101	80-120	6	30
Chloromethane	0.33	U	0.33	ug/kg	81	80	54-132	0	30
2-Chlorotoluene	0.14	U	0.14	ug/kg	99	99	78-120	0	30
4-Chlorotoluene	0.14	U	0.14	ug/kg	103	102	79-120	1	30
Chlorotrifluoroethene	0.50	U	0.50	ug/kg	98	101	22-131	3	30
1,2-Dibromo-3-chloropropane	0.70	U	0.70	ug/kg	101	96	58-120	5	30
Dibromochloromethane	0.20	U	0.20	ug/kg	97	95	77-120	2	30
1,2-Dibromoethane	0.17	U	0.17	ug/kg	103	99	80-120	5	30
Dibromomethane	0.24	U	0.24	ug/kg	100	96	80-120	3	30
1,2-Dichlorobenzene	0.09	U	0.09	ug/kg	101	100	79-120	1	30
1,3-Dichlorobenzene	0.12	U	0.12	ug/kg	97	97	78-120	0	30
1,4-Dichlorobenzene	0.16	U	0.16	ug/kg	99	98	79-120	1	30
Dichlorodifluoromethane	0.12	U	0.12	ug/kg	71	67	20-120	6	30
1,1-Dichloroethane	0.10	U	0.10	ug/kg	106	102	80-120	4	30
1,2-Dichloroethane	0.15	U	0.15	ug/kg	106	103	71-129	2	30
1,1-Dichloroethene	0.39	U	0.39	ug/kg	108	103	73-123	5	30
cis-1,2-Dichloroethene	0.19	U	0.19	ug/kg	103	99	80-120	5	30
trans-1,2-Dichloroethene	0.12	U	0.12	ug/kg	104	100	79-120	4	30
1,2-Dichloropropane	0.17	U	0.17	ug/kg	102	99	80-120	2	30
1,3-Dichloropropane	0.08	U	0.08	ug/kg	104	101	80-120	3	30
2,2-Dichloropropane	0.17	U	0.17	ug/kg	100	96	72-123	4	30
1,1-Dichloropropene	0.13	U	0.13	ug/kg	106	102	77-120	4	30
cis-1,3-Dichloropropene	0.16	U	0.16	ug/kg	98	96	80-120	2	30
trans-1,3-Dichloropropene	0.17	U	0.17	ug/kg	95	93	77-120	2	30
Ethylbenzene	0.06	U	0.06	ug/kg	104	103	80-120	1	30
Freon 113	0.11	U	0.11	ug/kg	106	99	61-126	7	30
Freon 133a	0.50	U	0.50	ug/kg	77*	77*	78-120	0	30
Hexachlorobutadiene	0.14	U	0.14	ug/kg	89	90	57-120	0	30
2-Hexanone	1.6	U	1.6	ug/kg	123	118	45-155	4	30
Isopropylbenzene	0.06	U	0.06	ug/kg	106	105	76-120	1	30
p-Isopropyltoluene	0.11	U	0.11	ug/kg	101	102	75-120	1	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21 U	0.21	4.0	ug/kg	103	99	74-121	4	30
4-Methyl-2-pentanone	0.39 U	0.39	8.0	ug/kg	107	101	61-134	5	30
Methylene Chloride	1.1 J	0.24	4.0	ug/kg	110	103	76-124	6	30
n-Propylbenzene	0.07 U	0.07	4.0	ug/kg	108	107	77-120	1	30
Styrene	0.10 U	0.10	4.0	ug/kg	104	102	76-120	2	30
1,1,1,2-Tetrachloroethane	0.11 U	0.11	4.0	ug/kg	101	99	80-120	2	30
1,1,2,2-Tetrachloroethane	0.23 U	0.23	4.0	ug/kg	98	94	71-123	4	30
Tetrachloroethene	0.20 U	0.20	4.0	ug/kg	103	99	77-120	3	30
Toluene	0.08 U	0.08	4.0	ug/kg	103	102	80-120	1	30
1,2,3-Trichlorobenzene	0.14 U	0.14	4.0	ug/kg	92	94	64-120	2	30
1,2,4-Trichlorobenzene	0.18 U	0.18	4.0	ug/kg	87	90	68-120	3	30
1,1,1-Trichloroethane	0.20 U	0.20	4.0	ug/kg	102	99	71-125	3	30
1,1,2-Trichloroethane	0.27 U	0.27	4.0	ug/kg	101	98	80-120	3	30
Trichloroethene	0.15 U	0.15	4.0	ug/kg	101	99	80-120	3	30
Trichlorofluoromethane	0.29 U	0.29	4.0	ug/kg	89	83	58-133	7	30
1,2,3-Trichloropropane	0.33 U	0.33	4.0	ug/kg	97	95	71-123	3	30
1,2,4-Trimethylbenzene	0.40 U	0.40	4.0	ug/kg	102	102	79-120	0	30
1,3,5-Trimethylbenzene	0.10 U	0.10	4.0	ug/kg	104	103	78-120	1	30
Vinyl Chloride	0.20 U	0.20	4.0	ug/kg	81	79	53-120	2	30
m+p-Xylene	0.17 U	0.17	4.0	ug/kg	106	105	80-120	2	30
o-Xylene	0.17 U	0.17	4.0	ug/kg	103	103	80-120	1	30
Batch number: E111461AA	Sample number(s): 6296041								
1,4-Dioxane	0.5 U	0.5	2.0	ug/l	97	106	80-123	9	30
Batch number: E111462AA	Sample number(s): 6296035-6296037, 6296039								
1,4-Dioxane	5.0 U	5.0	15	ug/kg	104	104	70-130	0	30
Batch number: L111471AA	Sample number(s): 6296041								
Acetone	6 U	6.	20	ug/l	134	111	49-234	19	30
Benzene	0.5 U	0.5	5	ug/l	97	98	79-120	1	30
Bromobenzene	1 U	1.	5	ug/l	92	93	80-120	1	30
Bromochloromethane	1 U	1.	5	ug/l	95	94	80-120	1	30
Bromodichloromethane	1 U	1.	5	ug/l	90	91	80-120	1	30
Bromoform	1 U	1.	5	ug/l	78	80	61-120	2	30
Bromomethane	1 U	1.	5	ug/l	102	103	44-120	1	30
2-Butanone	3 U	3.	10	ug/l	105	97	66-151	8	30
n-Butylbenzene	1 U	1.	5	ug/l	96	97	74-120	1	30
sec-Butylbenzene	1 U	1.	5	ug/l	91	94	78-120	4	30
tert-Butylbenzene	1 U	1.	5	ug/l	91	93	80-120	2	30
Carbon Tetrachloride	1 U	1.	5	ug/l	89	89	75-123	0	30
Chlorobenzene	0.8 U	0.8	5	ug/l	92	93	80-120	2	30
Chloroethane	1 U	1.	5	ug/l	103	103	49-129	0	30
2-Chloroethyl Vinyl Ether	2 U	2.	10	ug/l	92	93	56-129	1	30
Chloroform	0.8 U	0.8	5	ug/l	96	97	77-122	2	30
Chloromethane	1 U	1.	5	ug/l	99	100	60-129	1	30
2-Chlorotoluene	1 U	1.	5	ug/l	93	94	80-120	1	30
4-Chlorotoluene	1 U	1.	5	ug/l	94	97	80-120	3	30
Chlorotrifluoroethene	2 U	2.	5	ug/l	92	91	38-136	1	30
1,2-Dibromo-3-chloropropane	2 U	2.	5	ug/l	86	87	56-126	1	30
Dibromochloromethane	1 U	1.	5	ug/l	87	87	80-120	0	30
1,2-Dibromoethane	1 U	1.	5	ug/l	94	95	80-120	1	30
Dibromomethane	1 U	1.	5	ug/l	90	90	80-120	1	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	93	94	80-120	1	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	93	94	80-120	1	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	94	95	80-120	1	30
Dichlorodifluoromethane	2 U	2.	5	ug/l	81	83	47-120	3	30
1,1-Dichloroethane	1 U	1.	5	ug/l	95	96	79-120	2	30

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1 U	1.	5	ug/l	97	96	70-130	2	30
1,1-Dichloroethene	0.8 U	0.8	5	ug/l	90	90	74-123	0	30
cis-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	93	94	80-120	2	30
trans-1,2-Dichloroethene	0.8 U	0.8	5	ug/l	92	95	80-120	3	30
1,2-Dichloropropane	1 U	1.	5	ug/l	95	95	78-120	0	30
1,3-Dichloropropane	1 U	1.	5	ug/l	95	97	80-120	2	30
2,2-Dichloropropane	1 U	1.	5	ug/l	88	89	77-124	1	30
1,1-Dichloropropene	1 U	1.	5	ug/l	91	93	80-120	2	30
cis-1,3-Dichloropropene	1 U	1.	5	ug/l	91	91	80-120	0	30
trans-1,3-Dichloropropene	1 U	1.	5	ug/l	87	91	79-120	5	30
Ethylbenzene	0.8 U	0.8	5	ug/l	94	96	79-120	2	30
Freon 113	2 U	2.	10	ug/l	88	90	69-128	3	30
Freon 133a	2 U	2.	5	ug/l	105	101	77-120	5	30
Hexachlorobutadiene	2 U	2.	5	ug/l	81	84	58-120	4	30
2-Hexanone	3 U	3.	10	ug/l	93	92	65-136	2	30
Isopropylbenzene	1 U	1.	5	ug/l	94	96	77-120	2	30
p-Isopropyltoluene	1 U	1.	5	ug/l	91	91	80-120	1	30
Methyl Tertiary Butyl Ether	0.5 U	0.5	5	ug/l	92	92	76-120	0	30
4-Methyl-2-pentanone	3 U	3.	10	ug/l	90	90	70-121	0	30
Methylene Chloride	2 U	2.	5	ug/l	95	96	80-120	2	30
n-Propylbenzene	1 U	1.	5	ug/l	95	93	80-120	3	30
Styrene	1 U	1.	5	ug/l	91	94	80-120	3	30
1,1,1,2-Tetrachloroethane	1 U	1.	5	ug/l	89	92	80-120	3	30
1,1,2,2-Tetrachloroethane	1 U	1.	5	ug/l	100	99	71-120	1	30
Tetrachloroethene	0.8 U	0.8	5	ug/l	90	91	80-121	1	30
Toluene	0.7 U	0.7	5	ug/l	95	96	79-120	2	30
1,2,3-Trichlorobenzene	1 U	1.	5	ug/l	87	89	65-120	2	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	82	84	67-120	2	30
1,1,1-Trichloroethane	0.8 U	0.8	5	ug/l	95	94	75-127	1	30
1,1,2-Trichloroethane	0.8 U	0.8	5	ug/l	95	95	80-120	0	30
Trichloroethene	1 U	1.	5	ug/l	92	92	80-120	0	30
Trichlorofluoromethane	2 U	2.	5	ug/l	100	101	64-129	2	30
1,2,3-Trichloropropane	1 U	1.	5	ug/l	93	95	80-120	2	30
1,2,4-Trimethylbenzene	1 U	1.	5	ug/l	94	96	74-120	2	30
1,3,5-Trimethylbenzene	1 U	1.	5	ug/l	93	94	75-120	0	30
Vinyl Chloride	1 U	1.	5	ug/l	97	99	65-125	2	30
m+p-Xylene	0.8 U	0.8	5	ug/l	93	95	80-120	2	30
o-Xylene	0.8 U	0.8	5	ug/l	92	93	80-120	1	30

Batch number: 11144WAA026
N-Nitrosodimethylamine

Sample number(s): 6296055
0.500 U 0.500 1.00

ng/l 104 96 70-130 8 30

Batch number: 11144WAK026

Sample number(s): 6296055

Acenaphthene	0.010 U	0.010	0.050	ug/l	96	99	74-109	4	30
Acenaphthylene	0.010 U	0.010	0.050	ug/l	98	103	70-110	6	30
Anthracene	0.010 U	0.010	0.050	ug/l	102	104	66-111	2	30
Benzo(a)anthracene	0.010 U	0.010	0.050	ug/l	103	105	72-114	2	30
Benzo(a)pyrene	0.010 U	0.010	0.050	ug/l	142*	146*	60-127	3	30
Benzo(b)fluoranthene	0.010 U	0.010	0.050	ug/l	145*	148*	69-123	2	30
Benzo(g,h,i)perylene	0.010 U	0.010	0.050	ug/l	147*	152*	57-131	4	30
Benzo(k)fluoranthene	0.010 U	0.010	0.050	ug/l	143*	147*	59-130	3	30
Butylbenzylphthalate	0.070 J	0.050	1.0	ug/l	105	109	40-138	4	30
Di-n-butylphthalate	0.082 J	0.050	1.0	ug/l	102	105	74-131	3	30
Chrysene	0.010 U	0.010	0.050	ug/l	101	103	76-116	2	30
Dibenz(a,h)anthracene	0.010 U	0.010	0.050	ug/l	147*	153*	55-134	4	30
Diethylphthalate	0.050 U	0.050	1.0	ug/l	98	102	57-134	4	30
Dimethylphthalate	0.050 U	0.050	1.0	ug/l	97	103	40-119	6	30
Bis(2-Ethylhexyl)phthalate	0.11 J	0.050	1.0	ug/l	121	124	57-154	2	30

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	0.010 U	0.010	0.050	ug/l	102	104	75-116	2	30
Fluorene	0.010 U	0.010	0.050	ug/l	102	107	75-114	5	30
Indeno(1,2,3-cd)pyrene	0.010 U	0.010	0.050	ug/l	147*	152*	69-124	3	30
1-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	101	96	71-117	5	30
2-Methylnaphthalene	0.010 U	0.010	0.050	ug/l	90	85	75-115	5	30
Naphthalene	0.030 U	0.030	0.050	ug/l	97	96	72-109	1	30
N-Nitrosodimethylamine	0.010 U	0.010	0.050	ug/l	63	69	36-89	9	30
Di-n-octylphthalate	0.050 U	0.050	1.0	ug/l	144	152*	57-145	6	30
Phenanthrene	0.010 U	0.010	0.050	ug/l	97	99	76-111	2	30
Pyrene	0.010 U	0.010	0.050	ug/l	96	98	69-118	2	30

Batch number: 11145SLD026	Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056								
Acenaphthene	17 U	17.	170	ug/kg	81		76-111		
Acenaphthylene	17 U	17.	170	ug/kg	85		75-122		
Aniline	170 U	170.	500	ug/kg	63		34-94		
Anthracene	17 U	17.	170	ug/kg	84		76-112		
Benzidine	1,200 U	1,200.	3,300	ug/kg	38		15-121		
Benzo(a)anthracene	17 U	17.	170	ug/kg	85		73-112		
Benzo(a)pyrene	17 U	17.	170	ug/kg	87		69-122		
Benzo(b)fluoranthene	17 U	17.	170	ug/kg	87		61-127		
Benzo(g,h,i)perylene	17 U	17.	170	ug/kg	82		65-122		
Benzo(k)fluoranthene	17 U	17.	170	ug/kg	83		67-125		
Benzoic acid	170 U	170.	500	ug/kg	104		62-113		
Benzyl alcohol	170 U	170.	500	ug/kg	96		68-111		
4-Bromophenyl-phenylether	17 U	17.	170	ug/kg	75*		79-117		
Butylbenzylphthalate	17 U	17.	170	ug/kg	91		75-115		
Di-n-butylphthalate	17 U	17.	170	ug/kg	84		79-112		
Carbazole	17 U	17.	170	ug/kg	89		77-113		
4-Chloro-3-methylphenol	33 U	33.	170	ug/kg	97		74-119		
4-Chloroaniline	67 U	67.	170	ug/kg	51		10-110		
bis(2-Chloroethoxy)methane	17 U	17.	170	ug/kg	78		70-118		
bis(2-Chloroethyl)ether	17 U	17.	170	ug/kg	82		70-104		
bis(2-Chloroisopropyl)ether	17 U	17.	170	ug/kg	82		68-131		
2-Chloronaphthalene	17 U	17.	170	ug/kg	70		49-128		
2-Chlorophenol	17 U	17.	170	ug/kg	93		72-112		
4-Chlorophenyl-phenylether	33 U	33.	170	ug/kg	84		79-110		
Chrysene	17 U	17.	170	ug/kg	85		76-113		
Dibenz(a,h)anthracene	17 U	17.	170	ug/kg	82		70-128		
Dibenzofuran	17 U	17.	170	ug/kg	86		79-108		
1,2-Dichlorobenzene	17 U	17.	170	ug/kg	80		79-102		
1,3-Dichlorobenzene	17 U	17.	170	ug/kg	77		70-98		
1,4-Dichlorobenzene	17 U	17.	170	ug/kg	78		74-106		
3,3'-Dichlorobenzidine	100 U	100.	330	ug/kg	55		24-101		
2,4-Dichlorophenol	17 U	17.	170	ug/kg	88		75-111		
Diethylphthalate	17 U	17.	170	ug/kg	89		76-111		
2,4-Dimethylphenol	33 U	33.	170	ug/kg	85		72-111		
3,5-Dimethylphenol	33 U	33.	170	ug/kg	94		70-130		
Dimethylphthalate	17 U	17.	170	ug/kg	85		77-109		
4,6-Dinitro-2-methylphenol	170 U	170.	500	ug/kg	80		53-110		
2,4-Dinitrophenol	330 U	330.	1,000	ug/kg	88		37-120		
2,4-Dinitrotoluene	33 U	33.	170	ug/kg	97		73-115		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17 U	17.	170	ug/kg	88		79-115		
1,2-Diphenylhydrazine	17 U	17.	170	ug/kg	77		77-111		
bis(2-Ethylhexyl)phthalate	17 U	17.	330	ug/kg	90		75-117		
Fluoranthene	17 U	17.	170	ug/kg	89		78-116		
Fluorene	17 U	17.	170	ug/kg	87		75-116		
Hexachlorobenzene	17 U	17.	170	ug/kg	75*		78-116		
Hexachlorobutadiene	67 U	67.	170	ug/kg	66*		70-112		
Hexachlorocyclopentadiene	170 U	170.	500	ug/kg	70		46-115		
Hexachloroethane	17 U	17.	170	ug/kg	76		68-105		
Indeno(1,2,3-cd)pyrene	17 U	17.	170	ug/kg	86		64-119		
Isophorone	17 U	17.	170	ug/kg	82		69-110		
1-Methylnaphthalene	17 U	17.	170	ug/kg	84		74-105		
2-Methylnaphthalene	17 U	17.	170	ug/kg	81		76-105		
2-Methylphenol	33 U	33.	170	ug/kg	93		66-110		
4-Methylphenol	33 U	33.	170	ug/kg	98		66-117		
Naphthalene	17 U	17.	170	ug/kg	79		73-106		
2-Nitroaniline	17 U	17.	170	ug/kg	95		78-116		
3-Nitroaniline	33 U	33.	170	ug/kg	88		62-109		
4-Nitroaniline	67 U	67.	170	ug/kg	76		49-98		
Nitrobenzene	17 U	17.	170	ug/kg	79		71-104		
2-Nitrophenol	17 U	17.	170	ug/kg	80*		81-114		
4-Nitrophenol	170 U	170.	500	ug/kg	90		56-118		
N-Nitroso-di-n-propylamine	17 U	17.	170	ug/kg	88		63-107		
N-Nitrosodimethylamine	33 U	33.	170	ug/kg	76		60-106		
N-Nitrosodiphenylamine	17 U	17.	170	ug/kg	81		67-141		
Di-n-octylphthalate	17 U	17.	170	ug/kg	87		68-130		
Pentachlorophenol	170 U	170.	500	ug/kg	77		51-117		
Phenanthrene	17 U	17.	170	ug/kg	81		77-113		
Phenol	17 U	17.	170	ug/kg	97		58-112		
Pyrene	17 U	17.	170	ug/kg	87		75-115		
1,2,4-Trichlorobenzene	17 U	17.	170	ug/kg	74		73-108		
2,4,5-Trichlorophenol	33 U	33.	170	ug/kg	87		76-107		
2,4,6-Trichlorophenol	33 U	33.	170	ug/kg	84		78-111		
Batch number: 11145SLF026 Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056									
Acenaphthene	0.67 U	0.67	1.7	ug/kg	94		63-120		
Acenaphthylene	0.33 U	0.33	1.7	ug/kg	86		60-120		
Anthracene	0.33 U	0.33	1.7	ug/kg	94		55-120		
Benzo(a)anthracene	0.67 U	0.67	1.7	ug/kg	100		74-120		
Benzo(a)pyrene	0.67 U	0.67	1.7	ug/kg	119		58-129		
Benzo(b)fluoranthene	0.67 U	0.67	1.7	ug/kg	129		63-143		
Benzo(g,h,i)perylene	0.67 U	0.67	1.7	ug/kg	122		44-138		
Benzo(k)fluoranthene	0.67 U	0.67	1.7	ug/kg	132		54-142		
Butylbenzylphthalate	6.0 U	6.0	18	ug/kg	102		65-131		
Di-n-butylphthalate	6.0 U	6.0	18	ug/kg	109		75-137		
Chrysene	0.33 U	0.33	1.7	ug/kg	103		73-114		
Dibenz(a,h)anthracene	0.67 U	0.67	1.7	ug/kg	123		53-138		
Diethylphthalate	6.0 U	6.0	18	ug/kg	103		68-125		
Dimethylphthalate	6.0 U	6.0	18	ug/kg	101		79-121		
Bis(2-Ethylhexyl)phthalate	6.0 U	6.0	18	ug/kg	110		67-143		
Fluoranthene	0.67 U	0.67	1.7	ug/kg	103		64-120		
Fluorene	0.67 U	0.67	1.7	ug/kg	99		71-120		
Indeno(1,2,3-cd)pyrene	0.67 U	0.67	1.7	ug/kg	123		56-134		
1-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	93		72-120		
2-Methylnaphthalene	0.67 U	0.67	1.7	ug/kg	83		62-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67 U	0.67	1.7	ug/kg	88		67-120		
N-Nitrosodimethylamine	0.67 U	0.67	1.7	ug/kg	82		55-118		
Di-n-octylphthalate	6.0 U	6.0	18	ug/kg	134		55-176		
Phenanthrene	0.67 U	0.67	1.7	ug/kg	99		75-120		
Pyrene	0.67 U	0.67	1.7	ug/kg	100		56-121		

Batch number: 11146SLE026
N-Nitrosodimethylamine

Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054
16.7 U 16.7 33.3 ng/kg 83 70-130

Batch number: 11146WAD026

Sample number(s): 6296055

Aniline	1 U	1.	5	ug/l	71	76	49-101	6	30
Benzidine	20 U	20.	60	ug/l	68	74	34-117	9	30
Benzoic acid	6 U	6.	15	ug/l	44	26	10-69	51*	30
Benzyl alcohol	5 U	5.	15	ug/l	81	79	66-97	2	30
4-Bromophenyl-phenylether	1 U	1.	5	ug/l	91	92	82-117	0	30
Carbazole	1 U	1.	5	ug/l	96	94	81-114	2	30
4-Chloro-3-methylphenol	1 U	1.	5	ug/l	96	91	70-123	5	30
4-Chloroaniline	1 U	1.	5	ug/l	70	80	42-124	13	30
bis(2-Chloroethoxy)methane	1 U	1.	5	ug/l	92	93	74-124	1	30
bis(2-Chloroethyl)ether	1 U	1.	5	ug/l	91	89	77-108	2	30
bis(2-Chloroisopropyl)ether	1 U	1.	5	ug/l	91	90	62-127	1	30
2-Chloronaphthalene	2 U	2.	5	ug/l	95	97	54-132	2	30
2-Chlorophenol	1 U	1.	5	ug/l	97	92	77-108	6	30
4-Chlorophenyl-phenylether	2 U	2.	5	ug/l	93	92	82-111	1	30
Dibenzofuran	1 U	1.	5	ug/l	94	93	83-108	1	30
1,2-Dichlorobenzene	1 U	1.	5	ug/l	86	84	55-118	2	30
1,3-Dichlorobenzene	1 U	1.	5	ug/l	86	85	50-119	1	30
1,4-Dichlorobenzene	1 U	1.	5	ug/l	86	84	53-119	2	30
3,3'-Dichlorobenzidine	2 U	2.	5	ug/l	67	74	49-111	10	30
2,4-Dichlorophenol	1 U	1.	5	ug/l	95	90	80-109	5	30
2,4-Dimethylphenol	3 U	3.	10	ug/l	96	92	72-110	4	30
3,5-Dimethylphenol	3 U	3.	10	ug/l	104	99	70-130	4	30
4,6-Dinitro-2-methylphenol	5 U	5.	15	ug/l	100	93	78-119	8	30
2,4-Dinitrophenol	10 U	10.	30	ug/l	100	84	52-131	18	30
2,4-Dinitrotoluene	1 U	1.	5	ug/l	98	96	81-115	2	30
2,6-Dinitrotoluene	1 U	1.	5	ug/l	96	94	85-115	3	30
1,2-Diphenylhydrazine	1 U	1.	5	ug/l	99	96	78-116	3	30
Hexachlorobenzene	1 U	1.	5	ug/l	94	92	81-118	2	30
Hexachlorobutadiene	1 U	1.	5	ug/l	90	88	57-124	2	30
Hexachlorocyclopentadiene	5 U	5.	15	ug/l	77	76	36-118	1	30
Hexachloroethane	1 U	1.	5	ug/l	82	81	52-113	1	30
Isophorone	1 U	1.	5	ug/l	94	94	74-117	0	30
2-Methylphenol	1 U	1.	5	ug/l	84	82	64-101	3	30
4-Methylphenol	2 U	2.	5	ug/l	78	76	61-103	2	30
2-Nitroaniline	1 U	1.	5	ug/l	99	96	83-116	3	30
3-Nitroaniline	1 U	1.	5	ug/l	95	91	74-113	4	30
4-Nitroaniline	1 U	1.	5	ug/l	78	79	59-100	1	30
Nitrobenzene	1 U	1.	5	ug/l	92	92	75-109	0	30
2-Nitrophenol	1 U	1.	5	ug/l	93	93	86-120	0	30
4-Nitrophenol	10 U	10.	30	ug/l	47	46	16-78	2	30
N-Nitroso-di-n-propylamine	1 U	1.	5	ug/l	91	90	69-110	1	30
N-Nitrosodiphenylamine	2 U	2.	5	ug/l	94	92	67-136	2	30
Pentachlorophenol	3 U	3.	15	ug/l	98	90	53-110	8	30
Phenol	1 U	1.	5	ug/l	41	39	21-67	5	30
1,2,4-Trichlorobenzene	1 U	1.	5	ug/l	88	87	71-112	2	30
2,4,5-Trichlorophenol	1 U	1.	5	ug/l	98	93	79-107	6	30
2,4,6-Trichlorophenol	1 U	1.	5	ug/l	96	94	81-113	1	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max	
Batch number: 11151A20A TPH-GRO S.CA water C5-C12	Sample number(s): 20	U	20.	50	ug/l	109	109	75-135	0	30
Batch number: 11151B34A 9a TPH by EPA 8015B Gas C5-C12	Sample number(s): 0.2	U	0.2	1.0	mg/kg	68	74	67-119	8	30
Batch number: 111510006A	Sample number(s): 6296035-6296038, 6296042-6296043, 6296045-6296049, 6296051, 6296054									
4-Amino-2,6-Dinitrotoluene	60	U	60.	120	ug/kg	112		80-120		
2-Amino-4,6-Dinitrotoluene	40	U	40.	120	ug/kg	110		80-120		
2,6-Diamino-4-nitrotoluene	80	U	80.	240	ug/kg	100	96	54-134	3	30
2,4-Diamino-6-nitrotoluene	80	U	80.	240	ug/kg	99	96	54-134	3	30
1,3-Dinitrobenzene	40	U	40.	120	ug/kg	113		51-171		
2,4-Dinitrotoluene	40	U	40.	120	ug/kg	106		72-135		
2,6-Dinitrotoluene	40	U	40.	120	ug/kg	110		80-120		
HMX	100		100.	300	ug/kg	97		74-130		
Nitrobenzene	40	U	40.	120	ug/kg	110		80-120		
Nitroglycerin	800		800.	2,400	ug/kg	86		80-120		
2-Nitrotoluene	80	U	80.	120	ug/kg	107		78-128		
3-Nitrotoluene	100		100.	120	ug/kg	113		73-127		
4-Nitrotoluene	80	U	80.	120	ug/kg	106		80-120		
PETN	800		800.	2,400	ug/kg	116		80-120		
RDX	50	U	50.	120	ug/kg	100		75-131		
Tetryl	61	U	61.	120	ug/kg	104		70-168		
1,3,5-Trinitrobenzene	40	U	40.	120	ug/kg	107		77-137		
2,4,6-Trinitrotoluene	40	U	40.	120	ug/kg	111		80-120		
Batch number: 111580002A	Sample number(s): 6296055									
4-Amino-2,6-Dinitrotoluene	0.30	U	0.30	0.60	ug/l	110	110	80-120	0	30
2-Amino-4,6-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	100	110	80-120	10	30
2,6-Diamino-4-nitrotoluene	0.20	U	0.20	0.60	ug/l	100	103	50-122	3	30
2,4-Diamino-6-nitrotoluene	0.20	U	0.20	0.60	ug/l	100	103	50-122	3	30
1,3-Dinitrobenzene	0.20	U	0.20	0.60	ug/l	110	110	72-117	0	30
2,4-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	100	100	80-120	0	30
2,6-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	110	110	80-120	0	30
HMX	0.65	U	0.65	2.0	ug/l	100	100	65-125	0	30
Nitrobenzene	0.20	U	0.20	0.60	ug/l	100	100	75-121	0	30
Nitroglycerin	5.2	U	5.2	15	ug/l	92	92	80-120	0	30
2-Nitrotoluene	0.20	U	0.20	0.60	ug/l	100	100	74-120	0	30
3-Nitrotoluene	0.40	U	0.40	1.2	ug/l	110*	110*	69-107	0	30
4-Nitrotoluene	0.60	U	0.60	1.2	ug/l	100	100	80-120	0	30
PETN	6.0	U	6.0	18	ug/l	117	117	80-120	0	30
RDX	0.20	U	0.20	0.60	ug/l	97	96	70-125	1	30
Tetryl	0.40	U	0.40	0.60	ug/l	100	99	72-141	1	30
1,3,5-Trinitrobenzene	0.20	U	0.20	0.60	ug/l	99	96	53-129	3	30
2,4,6-Trinitrotoluene	0.20	U	0.20	0.60	ug/l	100	100	76-109	0	30
Batch number: 111440027A 25b Formaldehyde 8315A	Sample number(s): 10	U	10.	50	ug/l	62*	68*	69-130	9	30
Batch number: 111450003A 25a Formaldehyde 8315A	Sample number(s): 600 600. 1,500 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054									
	U				ug/kg	76*		80-126		

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 111450014A	Sample number(s): 6296055								
2,4-D	0.16 U	0.16	0.50	ug/l	120	116	73-157	3	30
Dalapon	0.25 U	0.25	1.3	ug/l	63	70	40-100	10	30
2,4-DB	0.30 U	0.30	1.0	ug/l	116	112	65-130	4	30
Dicamba	0.080 U	0.080	0.30	ug/l	96	92	68-135	4	30
Dinoseb	0.10 U	0.10	0.50	ug/l	74	74	32-91	0	30
2,4-DP (Dichlorprop)	0.16 U	0.16	0.50	ug/l	124	120	76-170	3	30
MCPA	300 U	300.	1,000	ug/l	90	88	65-128	2	30
MCP	50 U	50.	200	ug/l	96	96	67-137	0	30
2,4,5-T	0.015 U	0.015	0.050	ug/l	112	108	63-147	4	30
2,4,5-TP	0.010 U	0.010	0.050	ug/l	104	108	63-134	4	30
Batch number: 111450020A	Sample number(s): 6296042-6296049, 6296051-6296054, 6296056								
2,4-D	1.2 U	1.2	3.6	ug/kg	95		73-146		
Dalapon	4.4 U	4.4	9.0	ug/kg	49		11-116		
2,4-DB	0.62 U	0.62	1.7	ug/kg	100		62-131		
Dicamba	0.40 U	0.40	1.2	ug/kg	78		54-121		
Dinoseb	0.80 U	0.80	2.4	ug/kg	8*		10-36		
2,4-DP (Dichlorprop)	0.80 U	0.80	1.7	ug/kg	103		62-170		
MCPA	76 U	76.	250	ug/kg	71		60-130		
MCP (Mecoprop)	75 U	75.	250	ug/kg	101		54-137		
2,4,5-T	0.082 U	0.082	0.17	ug/kg	90		73-143		
2,4,5-TP	0.075 U	0.075	0.17	ug/kg	83		68-114		
Batch number: 111520014A	Sample number(s): 6296036, 6296039-6296040, 6296042, 6296054								
6a Perchlorate EPA 6850	2.1 U	2.1	5.0	ug/kg	104		85-115		
Batch number: 111460034A	Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056								
Aroclor 5432	1.0 U	1.0	3.3	ug/kg					
Aroclor 5442	1.0 U	1.0	3.3	ug/kg	81		36-106		
Aroclor 5460	1.0 U	1.0	3.3	ug/kg					
PCB-1016	0.33 U	0.33	1.7	ug/kg	98		72-120		
PCB-1221	0.33 U	0.33	1.7	ug/kg					
PCB-1232	0.33 U	0.33	1.7	ug/kg					
PCB-1242	0.33 U	0.33	1.7	ug/kg					
PCB-1248	0.33 U	0.33	1.7	ug/kg					
PCB-1254	0.33 U	0.33	1.7	ug/kg					
PCB-1260	0.39 U	0.39	1.7	ug/kg	103		65-137		
PCB-1262	0.33 U	0.33	1.7	ug/kg					
PCB-1268	0.33 U	0.33	1.7	ug/kg					
Batch number: 111460040A	Sample number(s): 6296055								
Aldrin	0.0020 U	0.0020	0.010	ug/l	101	111	54-159	10	30
Alpha BHC	0.0030 U	0.0030	0.010	ug/l	110	110	59-146	0	30
Beta BHC	0.0029 U	0.0029	0.010	ug/l	103	103	73-147	0	30
Gamma BHC - Lindane	0.0020 U	0.0020	0.010	ug/l	110	110	68-128	0	30
Chlordane	0.12 U	0.12	0.50	ug/l					
p,p-DDD	0.0050 U	0.0050	0.020	ug/l	120	120	71-139	0	30
p,p-DDE	0.0050 U	0.0050	0.020	ug/l	111	116	66-130	5	30
p,p-DDT	0.0050 U	0.0050	0.020	ug/l	114	114	53-126	0	30
Delta BHC	0.0029 U	0.0029	0.010	ug/l	113	113	76-148	0	30
Dieldrin	0.0053 U	0.0053	0.020	ug/l	125	125	76-132	0	30
Endosulfan I	0.0043 U	0.0043	0.010	ug/l	120	120	68-128	0	30
Endosulfan II	0.59 U	0.15	0.020	ug/l	110	110	59-144	0	30
Endosulfan Sulfate	0.0058 U	0.0058	0.020	ug/l	110	115	71-142	4	30
Endrin	0.0081 U	0.0081	0.020	ug/l	85	105	52-132	21	30
Endrin Aldehyde	0.020 U	0.020	0.10	ug/l	115	115	68-139	0	20

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Endrin Ketone	0.0050 U	0.0050	0.020	ug/l	130	125	69-146	4	30
Heptachlor	0.0026 U	0.0026	0.010	ug/l	120	130*	57-126	8	30
Heptachlor Epoxide	0.0023 U	0.0023	0.010	ug/l	102	112	73-156	10	30
Methoxychlor	0.030 U	0.030	0.10	ug/l	120	120	52-133	0	30
Mirex	0.085 U	0.085	0.25	ug/l					
Toxaphene	1.0 U	1.0	3.0	ug/l					

Batch number: 111460041A	Sample number(s): 6296055								
Aroclor 5432	0.10 U	0.10	0.50	ug/l					
Aroclor 5442	0.10 U	0.10	0.50	ug/l	72	84	35-84	15	30
Aroclor 5460	0.10 U	0.10	0.50	ug/l					
PCB-1016	0.10 U	0.10	0.50	ug/l	104	100	51-128	4	30
PCB-1221	0.10 U	0.10	0.50	ug/l					
PCB-1232	0.20 U	0.20	0.50	ug/l					
PCB-1242	0.10 U	0.10	0.50	ug/l					
PCB-1248	0.10 U	0.10	0.50	ug/l					
PCB-1254	0.10 U	0.10	0.50	ug/l					
PCB-1260	0.15 U	0.15	0.50	ug/l	96	102	56-135	6	30
PCB-1262	0.20 U	0.20	0.50	ug/l					
PCB-1268	0.16 U	0.16	0.50	ug/l					

Batch number: 111470004A	Sample number(s): 6296042-6296049, 6296051-6296054, 6296056								
Aldrin	0.066 U	0.066	0.17	ug/kg	79		44-135		
Alpha BHC	0.034 U	0.034	0.17	ug/kg	112		38-130		
Beta BHC	0.060 U	0.060	0.17	ug/kg	91		56-134		
Gamma BHC - Lindane	0.034 U	0.034	0.17	ug/kg	115		46-127		
Chlordane	0.80 U	0.80	3.4	ug/kg					
p,p-DDD	0.066 U	0.066	0.34	ug/kg	131		60-137		
p,p-DDE	0.066 U	0.066	0.34	ug/kg	95		59-141		
p,p-DDT	0.066 U	0.066	0.34	ug/kg	119		54-130		
Delta BHC	0.036 U	0.036	0.17	ug/kg	97		55-144		
Dieldrin	0.066 U	0.066	0.34	ug/kg	104		65-129		
Endosulfan I	0.044 U	0.044	0.17	ug/kg	100		45-123		
Endosulfan II	0.066 U	0.066	0.34	ug/kg	97		63-127		
Endosulfan Sulfate	0.066 U	0.066	0.34	ug/kg	112		72-138		
Endrin	0.066 U	0.066	0.34	ug/kg	110		62-129		
Endrin Aldehyde	0.066 U	0.066	0.34	ug/kg	94		55-132		
Endrin Ketone	0.066 U	0.066	0.34	ug/kg	98		69-139		
Heptachlor	0.060 U	0.060	0.17	ug/kg	100		43-124		
Heptachlor Epoxide	0.034 U	0.034	0.17	ug/kg	94		65-131		
Methoxychlor	0.34 U	0.34	1.7	ug/kg	126*		59-125		
Mirex	0.066 U	0.066	0.34	ug/kg					
Toxaphene	2.2 U	2.2	6.6	ug/kg					

Batch number: 111450001A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054								
Diethylene glycol	5.0 U	5.0	10	mg/kg	90		75-125		
Ethylene glycol	5.0 U	5.0	10	mg/kg	92		65-122		
Propylene glycol	5.0 U	5.0	10	mg/kg	90		75-125		

Batch number: 111450035A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054								
Ethanol	100 U	100.	500	ug/kg	91		71-129		
Isopropanol	100 U	100.	500	ug/kg	92		75-125		
Methanol	100 U	100.	500	ug/kg	94		68-129		

Batch number: 111450009A Sample number(s): 6296055

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
m-Terphenyl	0.080 U	0.080	0.25	mg/l	79	79	75-125	0	20
o-Terphenyl	0.080 U	0.080	0.25	mg/l	94	91	75-125	3	20
p-Terphenyl	0.080 U	0.080	0.25	mg/l	88	86	75-125	2	20
Batch number: 111450031A	Sample number(s): 6296055								
EFH (C12-C14)	0.10 U	0.10	0.60	mg/l	100	92	69-125	8	30
EFH (C15-C20)	0.10 U	0.10	0.60	mg/l	104	96	77-125	8	30
EFH (C21-C30)	0.10 U	0.10	0.60	mg/l	100	92	68-124	8	30
EFH (C30 - C40)	0.10 U	0.10	0.60	mg/l	93	93	80-121	0	30
EFH (C8-C11)	0.10 U	0.10	0.60	mg/l	78	72	46-103	8	30
Batch number: 111480002A	Sample number(s): 6296042-6296043, 6296045-6296049, 6296051, 6296054								
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	96		71-118		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	100		76-122		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	100		69-132		
EFH (C30 - C40)	0.76 J	0.40	1.2	mg/kg	95		67-127		
EFH (C8-C11)	0.40 U	0.40	1.2	mg/kg	73		54-107		
Batch number: 111510027A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	87		75-125		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	101		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	95		75-125		
Batch number: 111570011A	Sample number(s): 6296036								
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	88		71-118		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	94		76-122		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	99		69-132		
EFH (C30 - C40)	0.40 U	0.40	1.2	mg/kg	92		67-127		
EFH (C8-C11)	0.40 J	0.40	1.2	mg/kg	70		54-107		
Batch number: 111441848008	Sample number(s): 6296055								
Aluminum	0.0834 U	0.0834	0.200	mg/l	96	97	90-112	1	20
Boron	0.0138 U	0.0138	0.0500	mg/l	92	93	89-110	1	20
Calcium	0.0702 U	0.0702	0.200	mg/l	100	100	90-112	0	20
Iron	0.0522 U	0.0522	0.200	mg/l	100	101	90-112	2	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	97	97	80-120	0	20
Magnesium	0.0172 U	0.0172	0.100	mg/l	98	99	89-110	0	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	100	101	90-110	1	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	97	98	80-120	1	20
Potassium	0.239 U	0.239	0.500	mg/l	97	95	85-115	3	20
Sodium	0.433 U	0.433	1.00	mg/l	96	96	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	99	101	90-110	2	20
Tin	0.0098 U	0.0098	0.0200	mg/l	97	98	90-110	1	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	99	101	90-113	1	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	102	80-120	1	20
Batch number: 111446050005A	Sample number(s): 6296055								
Antimony	0.00030 U	0.00030	0.0010	mg/l	101	98	87-110	3	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	101	108	86-111	7	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	110	107	90-113	3	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	104	105	90-114	1	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	105	102	90-118	3	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	100	99	87-113	1	20
Copper	0.00038 U	0.00038	0.0020	mg/l	99	97	90-113	2	20
Lead	0.00052 U	0.0005	0.0010	mg/l	105	104	90-115	2	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	104	105	90-113	1	20
Silver	0.00080 U	0.0008	0.00050	mg/l	102	104	90-115	2	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Vanadium	0.00016 U	0.00016	0.00050	mg/l	106	102	89-116	5	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	105	105	90-116	0	20
Batch number: 111446050005B	Sample number(s): 6296055								
Selenium	0.00025 U	0.00025	0.0020	mg/l	98	101	85-114	3	20
Batch number: 111446050005C	Sample number(s): 6296055								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	102	103	89-115	1	20
Batch number: 111446050005D	Sample number(s): 6296055								
Barium	0.00053 U	0.00053	0.0020	mg/l	105	102	88-113	3	20
Batch number: 111465713002	Sample number(s): 6296055								
Mercury	0.000046 U	0.00004	0.00020	mg/l	97	97	80-120	1	20
Batch number: 111515708001	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								
Aluminum	5.03 U	5.03	20.0	mg/kg	104		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	96		78-110		
Calcium	6.13 U	6.13	20.0	mg/kg	101		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	106		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	105		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	103		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	105		89-112		
Phosphorus	1.10 J	0.560	10.0	mg/kg	104		80-120		
Potassium	18.0 U	18.0	50.0	mg/kg	103		78-110		
Sodium	37.3 U	37.3	100	mg/kg	101		87-110		
Strontium	0.0620 U	0.0620	0.500	mg/kg	101		86-110		
Tin	1.58 J	1.00	10.0	mg/kg	103		90-114		
Titanium	0.380 U	0.380	1.00	mg/kg	120		80-120		
Zirconium	0.840 U	0.840	5.00	mg/kg	102		80-120		
Batch number: 111515711001	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								
Mercury	0.0029 U	0.0029	0.0997	mg/kg	91		88-123		
Batch number: 111536050004A	Sample number(s): 6296055								
Thallium	0.00015 U	0.00015	0.00050	mg/l	105	106	89-116	1	20
Batch number: 111541026001A	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								
Antimony	0.0600 U	0.0600	0.200	mg/kg	121		27-181		
Arsenic	0.0800 U	0.0800	0.400	mg/kg	102		83-113		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	100		86-111		
Cadmium	0.0400 U	0.0400	0.100	mg/kg	105		82-118		
Chromium	0.120 U	0.120	0.400	mg/kg	109		80-120		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	100		82-118		
Copper	0.0807 J	0.0660	0.400	mg/kg	97		83-110		
Lead	0.0104 U	0.0104	0.200	mg/kg	100		83-110		
Nickel	0.100 U	0.100	0.400	mg/kg	101		81-110		
Silver	0.0120 U	0.0120	0.100	mg/kg	102		81-111		
Thallium	0.0300 U	0.0300	0.100	mg/kg	99		83-110		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	102		84-116		
Zinc	0.560 U	0.560	3.00	mg/kg	102		81-112		
Batch number: 111541026001B	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								
Selenium	0.0400 U	0.0400	0.400	mg/kg	102		83-111		
Batch number: 111541026001C	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	114		78-122		
Batch number: 111541026001D	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056								
Barium	0.108 U	0.108	0.400	mg/kg	101		81-111		
Batch number: 11143495401B	Sample number(s): 6296055								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	103	102	90-110	1	20
Batch number: 11144196901B	Sample number(s): 6296055								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	91	91	90-110	1	20
Batch number: 11146117101B	Sample number(s): 6296055								
17b Cyanide by 9012B	0.0050 U	0.0050	0.010	mg/l	103	102	90-110	2	20
Batch number: 11151102201A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296048, 6296050, 6296054								
17a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	107		80-120		
Batch number: 11151102201B	Sample number(s): 6296051								
17a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	107		80-120		
Batch number: 11151621202A	Sample number(s): 6296035-6296040, 6296042-6296045								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	98		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	98		90-110		
Batch number: 11151621202B	Sample number(s): 6296046-6296048, 6296050-6296054, 6296056								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	98		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	98		90-110		
Batch number: 11152243201A	Sample number(s): 6296035-6296040, 6296042-6296048, 6296050-6296054, 6296056								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	98		80-120		
Batch number: 11153621201A	Sample number(s): 6296035-6296040, 6296042-6296045								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	96		85-115		
Batch number: 11153621201B	Sample number(s): 6296046-6296048, 6296050-6296054, 6296056								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	96		85-115		
Batch number: 11154621701A	Sample number(s): 6296055								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	98	99	85-115	0	20
Batch number: 11144020001A	Sample number(s): 6296055								
18b pH by 9040B					100	100	90-110	0	3
Batch number: 11145039403A	Sample number(s): 6296035-6296040, 6296042-6296044								
18a pH by 9045C					100		95-105		
Batch number: 11145039403B	Sample number(s): 6296045-6296047, 6296050-6296054, 6296056								
18a pH by 9045C					100		95-105		
Batch number: 11153162401B	Sample number(s): 6296039-6296040, 6296044, 6296052-6296053								
Moisture Content by 160.3					100		80-120		
Batch number: 11160162402A	Sample number(s): 6296035-6296038, 6296042-6296043, 6296045-6296050								
28a Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		
Batch number: 11160162402B	Sample number(s): 6296051, 6296054								

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Moisture Content by 160.3					100		80-120		
Batch number: 11304162401A	Sample number(s): 6296056				100		80-120		
Moisture Content by 160.3									

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: E111462AA	Sample number(s): 6296035-6296037, 6296039 UNSPK: P298873								
1,4-Dioxane	103	111	70-130	18	30				
Batch number: 11145SLD026	Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056 UNSPK: 6296047								
Acenaphthene	95	98	75-115	3	30				
Acenaphthylene	100	102	81-110	2	30				
Aniline	73	76	35-95	3	30				
Anthracene	98	98	75-115	0	30				
Benidine	26*	29*	35-141	12	30				
Benzo(a)anthracene	101	99	65-122	2	30				
Benzo(a)pyrene	98	101	57-126	3	30				
Benzo(b)fluoranthene	97	99	59-125	2	30				
Benzo(g,h,i)perylene	101	101	59-127	1	30				
Benzo(k)fluoranthene	96	97	56-132	1	30				
Benzoic acid	57	62	10-173	9	30				
Benzyl alcohol	109	115	67-115	6	30				
4-Bromophenyl-phenylether	89	88	67-129	2	30				
Butylbenzylphthalate	112	108	73-134	4	30				
Di-n-butylphthalate	94	95	67-123	1	30				
Carbazole	99	101	64-120	2	30				
4-Chloro-3-methylphenol	109	111*	76-110	2	30				
4-Chloroaniline	76	82	23-95	8	30				
bis(2-Chloroethoxy)methane	89	91	75-104	3	30				
bis(2-Chloroethyl)ether	87	95	60-116	8	30				
bis(2-Chloroisopropyl)ether	86	93	55-142	7	30				
2-Chloronaphthalene	142*	83	50-141	53*	30				
2-Chlorophenol	101	106	73-121	5	30				
4-Chlorophenyl-phenylether	97	100	80-109	2	30				
Chrysene	99	99	62-128	0	30				
Dibenz(a,h)anthracene	102	101	65-125	1	30				
Dibenzofuran	100	101	71-112	1	30				
1,2-Dichlorobenzene	78	89	66-108	13	30				
1,3-Dichlorobenzene	75	85	63-109	12	30				
1,4-Dichlorobenzene	77	87	70-100	11	30				
3,3'-Dichlorobenzidine	77	78	16-119	1	30				
2,4-Dichlorophenol	103	103	78-117	0	30				
Diethylphthalate	99	101	66-118	1	30				
2,4-Dimethylphenol	93	95	78-110	3	30				
3,5-Dimethylphenol	106	107	70-130	0	30				
Dimethylphthalate	96	98	64-118	2	30				
4,6-Dinitro-2-methylphenol	78	70	24-116	10	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2,4-Dinitrophenol	66	53	20-143	22	30				
2,4-Dinitrotoluene	108	109	73-113	1	30				
2,6-Dinitrotoluene	102	102	69-123	1	30				
1,2-Diphenylhydrazine	93	94	71-129	1	30				
bis(2-Ethylhexyl)phthalate	113	106	63-122	6	30				
Fluoranthene	91	96	73-112	5	30				
Fluorene	101	104	77-111	3	30				
Hexachlorobenzene	93	95	77-114	1	30				
Hexachlorobutadiene	71	78	62-120	10	30				
Hexachlorocyclopentadiene	68	71	10-153	4	30				
Hexachloroethane	71	81	57-109	13	30				
Indeno(1,2,3-cd)pyrene	101	104	61-126	3	30				
Isophorone	94	96	73-102	3	30				
1-Methylnaphthalene	97	102	73-112	5	30				
2-Methylnaphthalene	91	94	76-114	3	30				
2-Methylphenol	99	105	75-111	6	30				
4-Methylphenol	108	111	71-111	3	30				
Naphthalene	88	91	72-116	3	30				
2-Nitroaniline	112	110	67-125	1	30				
3-Nitroaniline	111	112	59-122	0	30				
4-Nitroaniline	91	91	52-112	0	30				
Nitrobenzene	90	92	72-106	2	30				
2-Nitrophenol	99	97	74-115	2	30				
4-Nitrophenol	92	90	54-113	2	30				
N-Nitroso-di-n-propylamine	96	104	60-116	8	30				
N-Nitrosodimethylamine	86	88	47-116	2	30				
N-Nitrosodiphenylamine	92	94	86-145	2	30				
Di-n-octylphthalate	99	101	56-126	1	30				
Pentachlorophenol	86	84	28-127	2	30				
Phenanthrene	94	97	65-125	3	30				
Phenol	104	111	58-126	6	30				
Pyrene	110	102	74-126	8	30				
1,2,4-Trichlorobenzene	85	89	72-115	5	30				
2,4,5-Trichlorophenol	100	103	78-109	2	30				
2,4,6-Trichlorophenol	101	105	77-115	3	30				

Batch number: 11145SLF026

Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056 UNSPK:
6296047

Acenaphthene	102	97	63-105	5	30
Acenaphthylene	99	95	67-114	4	30
Anthracene	105	102	60-122	3	30
Benzo(a)anthracene	98	99	59-128	1	30
Benzo(a)pyrene	126	125	45-138	0	30
Benzo(b)fluoranthene	135	137	43-155	2	30
Benzo(g,h,i)perylene	84	74	33-141	13	30
Benzo(k)fluoranthene	129	130	42-144	1	30
Butylbenzylphthalate	104	111	57-173	6	30
Di-n-butylphthalate	122	117	65-148	4	30
Chrysene	98	100	48-134	2	30
Dibenz(a,h)anthracene	96	86	22-133	11	30
Diethylphthalate	106	103	70-136	4	30
Dimethylphthalate	104	101	74-118	3	30
Bis(2-Ethylhexyl)phthalate	103	101	39-167	2	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Fluoranthene	112	119	26-166	6	30				
Fluorene	105	101	66-122	4	30				
Indeno(1,2,3-cd)pyrene	93	84	21-143	10	30				
1-Methylnaphthalene	101	94	72-123	7	30				
2-Methylnaphthalene	91	85	64-103	7	30				
Naphthalene	97	89	61-102	9	30				
N-Nitrosodimethylamine	102	96	48-113	6	30				
Di-n-octylphthalate	140	142	40-192	1	30				
Phenanthrene	103	104	12-165	0	30				
Pyrene	89	94	15-153	6	30				
Batch number: 11146SLE026 Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047									
N-Nitrosodimethylamine	24*	24*	70-130	1	30				
Batch number: 11151B34A Sample number(s): 6296036 UNSPK: P302747									
9a TPH by EPA 8015B Gas C5-C12	61	62	39-118	5	30				
Batch number: 111510006A Sample number(s): 6296035-6296038, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047									
4-Amino-2,6-Dinitrotoluene	113	110	80-127	3	50				
2-Amino-4,6-Dinitrotoluene	112	110	80-137	2	50				
1,3-Dinitrobenzene	116	114	38-166	2	50				
2,4-Dinitrotoluene	108	107	80-131	1	50				
2,6-Dinitrotoluene	111	109	80-127	1	50				
HMX	100	96	63-128	4	50				
Nitrobenzene	112	113	80-125	1	50				
Nitroglycerin	101	99	80-120	2	50				
2-Nitrotoluene	106	105	80-122	1	50				
3-Nitrotoluene	114	112	72-119	1	50				
4-Nitrotoluene	105	104	80-125	1	50				
PETN	127*	122*	80-121	4	50				
RDX	93	91	75-129	2	50				
Tetryl	92	80	55-174	13	50				
1,3,5-Trinitrobenzene	108	105	82-126	3	50				
2,4,6-Trinitrotoluene	112	108	82-130	3	50				
Batch number: 111450003A Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047									
25a Formaldehyde 8315A	79*	78*	80-120	1	50				
Batch number: 111450020A Sample number(s): 6296042-6296049, 6296051-6296054, 6296056 UNSPK: 6296047									
2,4-D	102	94	17-180	9	35				
Dalapon	58	46	10-125	24	50				
2,4-DB	62	68	10-201	9	50				
Dicamba	86	72	10-190	17	50				
Dinoseb	9*	7*	10-46	27	35				
2,4-DP (Dichlorprop)	100	87	33-178	15	50				
MCPA	89	74	10-213	18	50				
MCPP (Mecoprop)	70	78	10-184	11	50				
2,4,5-T	70	59	10-156	17	35				
2,4,5-TP	59	51	24-141	12	35				

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 111520014A 6a Perchlorate EPA 6850	103	107	80-120	3	20	6296036, 6296039-6296040, 6296042, 6296054	UNSPK: 6296036		
Batch number: 111460034A	Sample number(s): 6296035-6296040, 6296042-6296049, 6296051-6296054, 6296056 UNSPK: 6296047								
PCB-1016	87	109	29-146	22	50				
PCB-1260	98	109	39-149	11	50				
Batch number: 111470004A	Sample number(s): 6296042-6296049, 6296051-6296054, 6296056 UNSPK: 6296047								
Aldrin	39	45	16-126	14	50				
Alpha BHC	58	61	10-129	5	50				
Beta BHC	47	53	14-147	13	50				
Gamma BHC - Lindane	64	64	10-140	0	50				
p,p-DDD	51	56	16-163	8	50				
p,p-DDE	62	49	18-161	22	50				
p,p-DDT	95	134	10-176	21	50				
Delta BHC	50	53	23-140	6	50				
Dieldrin	62	47	19-154	22	50				
Endosulfan I	36	42	16-137	15	50				
Endosulfan II	31	52	28-154	52*	50				
Endosulfan Sulfate	57	57	21-160	0	50				
Endrin	48	55	11-149	12	50				
Endrin Aldehyde	39	34	10-148	17	35				
Endrin Ketone	33	43	22-165	24	50				
Heptachlor	70	76	13-126	8	50				
Heptachlor Epoxide	42	53	13-157	19	50				
Methoxychlor	72	96	32-147	28	50				
Batch number: 111450001A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047								
Diethylene glycol	40*	39*	59-109	4	20				
Ethylene glycol	60*	60*	63-107	1	20				
Propylene glycol	68	68	63-107	0	20				
Batch number: 111450035A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047								
Ethanol	66	64	48-130	2	20				
Isopropanol	71	71	12-149	1	20				
Methanol	71	69	43-138	2	20				
Batch number: 111480002A	Sample number(s): 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	40 (2)	118 (2)	49-123	15	20				
EFH (C21-C30)	-198 (2)	1919 (2)	49-123	63*	20				
EFH (C30 - C40)	-1805 (2)	3790 (2)	49-123	50*	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 111510027A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296049, 6296051, 6296054 UNSPK: 6296047								
m-Terphenyl	82	80	75-125	2	20				
o-Terphenyl	98	95	75-125	4	20				

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Quality Control Summary

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Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
p-Terphenyl	94	93	75-125	1	20				
Batch number: 111570011A	Sample number(s): 6296036 UNSPK: P301476								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	-196 (2)	-43 (2)	49-123	26*	20				
EFH (C21-C30)	-889 (2)	-1432 (2)	49-123	31*	20				
EFH (C30 - C40)	-226 (2)	-1853 (2)	49-123	25*	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 111515708001	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG: 6296047								
Aluminum	1488 (2)	2387 (2)	75-125	6	20	26,300	26,700	2	20
Boron	99	99	84-115	2	20	2.45 J	1.62 J	41* (1)	20
Calcium	-2319 (2)	-1985 (2)	75-125	15	20	16,100	7,380	74*	20
Iron	677 (2)	-340 (2)	75-125	4	20	27,900	27,800	0	20
Lithium	101	103	82-114	4	20	22.7	23.2	2	20
Magnesium	222 (2)	309 (2)	75-125	3	20	5,790	6,030	4	20
Manganese	138 (2)	29 (2)	75-125	12	20	393	379	4	20
Phosphorus	128*	89	75-125	8	20	311	300	4	20
Potassium	161*	154*	75-125	1	20	3,830	3,840	0	20
Sodium	98	98	75-125	1	20	124	122	2 (1)	20
Strontium	93	94	75-115	2	20	36.4	34.3	6	20
Tin	88	87	80-110	1	20	2.80 J	2.75 J	2 (1)	20
Titanium	215 (2)	285 (2)	75-125	4	20	1,450	1,410	3	20
Zirconium	94	94	75-125	2	20	6.08	5.92	3 (1)	20
Batch number: 111515711001	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG: 6296047								
Mercury	102	90	65-135	7	20	0.0403 J	0.0135 J	100* (1)	20
Batch number: 111541026001A	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG: 6296047								
Antimony	60*	74*	75-125	14	20	0.445	0.258	53* (1)	20
Arsenic	89	143*	75-125	11	20	7.11	5.29	29*	20
Beryllium	97	122	75-125	11	20	0.875	0.676	26*	20
Cadmium	103	135*	75-125	18	20	0.633	0.325	64* (1)	20
Chromium	100	85	75-125	4	20	26.2	24.7	6	20
Cobalt	91	90	75-125	0	20	11.3	8.28	31*	20
Copper	102	144*	75-125	13	20	19.8	14.9	28*	20
Lead	121 (2)	249 (2)	75-125	16	20	17.4	15.0	15	20
Nickel	158*	145*	75-125	3	20	25.1	17.9	34*	20
Silver	126*	145*	75-125	14	20	0.0620 J	0.118	63* (1)	20
Thallium	107	150*	75-125	18	20	0.428	0.293	37* (1)	20
Vanadium	118 (2)	230 (2)	75-125	11	20	79.6	58.7	30*	20
Zinc	325 (2)	140 (2)	75-125	11	20	141	133	6	20
Batch number: 111541026001B	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG: 6296047								

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Quality Control Summary

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Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Selenium	6296047 109	122	75-125	10	20	0.202 J	0.121 J	50* (1)	20
Batch number: 111541026001C	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG: 6296047								
Molybdenum	122	141*	75-125	13	20	1.31	0.990	28*	20
Batch number: 111541026001D	Sample number(s): 6296035-6296040, 6296042-6296054, 6296056 UNSPK: 6296047 BKG: 6296047								
Barium	31 (2)	-349 (2)	75-125	24*	20	173	121	35*	20
Batch number: 11151102201A	Sample number(s): 6296036, 6296042-6296043, 6296045-6296048, 6296050, 6296054 UNSPK: 6296047 BKG: 6296047								
17a Cyanide by 9012B	106		75-125			0.17 U	0.18 U	0 (1)	20
Batch number: 11151102201B	Sample number(s): 6296051 UNSPK: 6296051 BKG: 6296051								
17a Cyanide by 9012B	106		75-125			0.18 U	0.18 U	0 (1)	20
Batch number: 11151621202A	Sample number(s): 6296035-6296040, 6296042-6296045 UNSPK: 6296035 BKG: 6296035								
11a Anions by 300.0 - Fluoride	94		80-120			5.3	6.4	19	20
11a Anions by 300.0 - Nitrate	101		80-120			0.81 J	1.0 J	22* (1)	20
Batch number: 11151621202B	Sample number(s): 6296046-6296048, 6296050-6296054, 6296056 UNSPK: 6296047 BKG: 6296047								
11a Anions by 300.0 - Fluoride	55*		80-120			4.1	4.0	2 (1)	20
11a Anions by 300.0 - Nitrate	92		80-120			1.4 J	1.0 J	30* (1)	20
Batch number: 11152243201A	Sample number(s): 6296035-6296040, 6296042-6296048, 6296050-6296054, 6296056 UNSPK: 6296047 BKG: 6296047								
3a Cr VI by EPA 7199	98		75-125			0.64 J	0.77 J	18 (1)	20
Batch number: 11153621201A	Sample number(s): 6296035-6296040, 6296042-6296045 UNSPK: 6296035 BKG: 6296035								
7a Perchlorate EPA 314.0	116		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11153621201B	Sample number(s): 6296046-6296048, 6296050-6296054, 6296056 UNSPK: 6296047 BKG: 6296047								
7a Perchlorate EPA 314.0	118		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11145039403A	Sample number(s): 6296035-6296040, 6296042-6296044 BKG: 6296035								
18a pH by 9045C						8.34	8.34	0	3
Batch number: 11145039403B	Sample number(s): 6296045-6296047, 6296050-6296054, 6296056 BKG: 6296047								
18a pH by 9045C						8.04	8.00	0	3
Batch number: 11153162401B	Sample number(s): 6296039-6296040, 6296044, 6296052-6296053 BKG: 6296040								
Moisture Content by 160.3						13.1	13.8	6	20
Batch number: 11160162402A	Sample number(s): 6296035-6296038, 6296042-6296043, 6296045-6296050 BKG: 6296047								
28a Moisture Content by 160.3						12.9	12.9	0	20
Moisture Content by 160.3						12.9	12.9	0	20
Moisture Content by 160.3						12.9	12.9	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11160162402B Moisture Content by 160.3	Sample number(s): 6296051, 6296054					BKG: P301476 9.5	9.8	2	20
Batch number: 11304162401A Moisture Content by 160.3	Sample number(s): 6296056					BKG: 6296056 39.6	36.6	8	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B
Batch number: B111471AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6296035	100	97	99	95
6296036	103	106	98	97
6296037	103	106	98	97
6296039	102	102	99	95
Blank	101	102	100	96
LCS	102	102	102	101
LCSD	100	100	102	100
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM
Batch number: E111461AA
Toluene-d8

6296041	106
Blank	106
LCS	106
LCSD	106
Limits:	80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM
Batch number: E111462AA
Toluene-d8

6296035	97
6296036	97
6296037	97
6296039	97
Blank	98
LCS	98
LCSD	98
MS	93
MSD	95

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Surrogate Quality Control

Limits: 70-130

Analysis Name: 1b Volatile Organics EPA8260
Batch number: L111471AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6296041	102	102	101	98
Blank	103	101	101	99
LCS	103	102	102	100
LCSD	102	102	103	101

Limits: 86-118 80-120 88-110 86-115

Analysis Name: 15b NDMA by 1625C
Batch number: 11144WAA026

N-Nitrosodimethylamine-d6

6296055	106
Blank	97
LCS	96
LCSD	109

Limits: 50-150

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 11144WAK026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296055	100	95	103
Blank	93	91	89
LCS	106	94	97
LCSD	108	101	103

Limits: 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 11145SLD026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296035	94	90	95	84	81	88
6296036	94	90	99	83	81	89
6296037	96	93	96	83	83	88
6296038	87	84	93	76	75	81
6296039	92	90	87	77	74	81
6296040	98	92	96	80	80	91
6296042	85	85	87	79	84	73
6296043	95	92	92	88	89	84
6296044	80	79	85	77	82	73
6296045	91	87	96	85	91	83
6296046	91	88	92	85	90	82
6296047	96	92	104	81	81	88
6296048	101	94	104	85	83	90
6296049	103	95	104	86	84	86
6296051	92	86	93	86	90	77
6296052	92	86	95	86	89	80
6296053	76	74	83	75	78	74

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Surrogate Quality Control

6296054	92	88	93	87	89	79
6296056	87	85	90	84	88	74
Blank	91	90	101	84	84	76
LCS	90	86	91	74	69	72
MS	101	94	104	85	83	90
MSD	103	95	104	86	84	86
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11145SLF026

Nitrobenzene-d5		2-Fluorobiphenyl	Terphenyl-d14
6296035	90	88	102
6296036	95	91	107
6296037	94	89	102
6296038	93	90	105
6296039	96	90	104
6296040	84	90	101
6296042	93	94	96
6296043	91	91	94
6296044	96	93	93
6296045	97	96	96
6296046	104	100	101
6296047	103	100	105
6296048	115	103	100
6296049	109	99	98
6296051	102	99	103
6296052	100	97	101
6296053	97	95	96
6296054	89	86	90
6296056	81	76	84
Blank	103	103	108
LCS	109	100	103
MS	115	103	100
MSD	109	99	98
Limits:	40-130	45-130	45-135

Analysis Name: 15a NDMA by 1625C
Batch number: 11146SLE026

N-Nitrosodimethylamine-d6	
6296036	67
6296042	94
6296043	129
6296045	90
6296046	91
6296047	152*
6296048	164*
6296049	143
6296051	160*
6296054	145
Blank	91
LCS	104
MS	164*

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Surrogate Quality Control

MSD 143

Limits: 50-150

Analysis Name: 5b Semivolatiles by EPA 8270C

Batch number: 11146WAD026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296055	50	31	98	86	88	85
Blank	59	36	96	91	88	84
LCS	62	40	94	86	88	84
LCSD	60	39	92	86	87	85
Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12

Batch number: 11151A20A

Trifluorotoluene-F

6296041 70
Blank 70
LCS 112
LCSD 108

Limits: 63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12

Batch number: 11151B34A

Trifluorotoluene-F

6296036 71
Blank 76
LCS 79
LCSD 87
MS 74
MSD 74

Limits: 61-122

Analysis Name: 25b Formaldehyde 8315A

Batch number: 111440027A

Butyraldehyde

6296055 62
Blank 65
LCS 62
LCSD 64

Limits: 45-145

Analysis Name: 25a Formaldehyde 8315A

Batch number: 111450003A

Butyraldehyde

6296036 104
6296042 124
6296043 105

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Surrogate Quality Control

6296045	120
6296046	128*
6296047	125
6296048	127*
6296049	134*
6296051	120
6296054	125
Blank	125
LCS	121
MS	127*
MSD	134*

Limits: 64-126

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 111450014A
2,4-Dichlorophenylacetic
acid

6296055	90
Blank	92
LCS	109
LCSD	106

Limits: 35-144

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 111450020A
2,4-Dichlorophenylacetic
acid

6296042	87
6296043	87
6296044	89
6296045	99
6296046	84
6296047	89
6296048	100
6296049	95
6296051	81
6296052	94
6296053	104
6296054	93
6296056	295*
Blank	79
LCS	83
MS	100
MSD	95

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 111460034A
Tetrachloro-m-xylene Decachlorobiphenyl

6296035	104	94
6296036	105	94

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Surrogate Quality Control

6296037	100	96
6296038	97	90
6296039	107	100
6296040	107	79
6296042	82	82
6296043	99	94
6296044	107	105
6296045	112	93
6296046	105	78
6296047	108	88
6296048	106	85
6296049	98	82
6296051	103	88
6296052	101	86
6296053	121	105
6296054	113	90
6296056	68	55
Blank	121	107
LCS	120	109
MS	106	85
MSD	98	82

Limits: 53-139 45-120

Analysis Name: 12b Pesticides by 8081A
Batch number: 111460040A
Tetrachloro-m-xylene Decachlorobiphenyl

6296055	94	58
Blank	100	88
LCS	98	107
LCSD	102	99

Limits: 52-141 40-144

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 111460041A
Tetrachloro-m-xylene Decachlorobiphenyl

6296055	112	55
Blank	116	86
LCS	119	70
LCSD	116	97

Limits: 30-150 30-150

Analysis Name: 12a Pesticides by 8081A
Batch number: 111470004A
Tetrachloro-m-xylene Decachlorobiphenyl

6296042	97	79
6296043	79	119
6296044	79	178*
6296045	81	93
6296046	62	55
6296047	53	67
6296048	50	83

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

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- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Surrogate Quality Control

6296049	57	102
6296051	67	61
6296052	74	79
6296053	61	93
6296054	75	67
6296056	22*	119
Blank	34*	42
LCS	82	103
MS	50	44
MSD	57	56

Limits: 50-130 20-120

Analysis Name: 16a Energetics by 8330A
Batch number: 111510006A
2-Nitro-m-xylene

6296035	133
6296036	127
6296037	132
6296038	124
6296042	123
6296043	118
6296045	120
6296046	129
6296047	125
6296048	126
6296049	122
6296051	123
6296054	123
Blank	119
LCS	126
LCSD	123
MS	126
MSD	122

Limits: 80-146

Analysis Name: 16b Energetics by 8330A
Batch number: 111580002A
2-Nitro-m-xylene

6296055	110
Blank	106
LCS	104
LCSD	107

Limits: 50-134

Analysis Name: 21a Glycols by 8015B
Batch number: 111450001A
Tetramethylene glycol

6296036	84
6296042	90
6296043	93
6296045	89

*- Outside of specification

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- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Surrogate Quality Control

6296046 87
6296047 86
6296048 86
6296049 85
6296051 83
6296054 81
Blank 90
LCS 98
MS 86
MSD 85

Limits: 29-137

Analysis Name: 20b Terphenyls by 8015B
Batch number: 111450009A
n-Triacontane-d62

6296055 27*
Blank 84
LCS 83
LCSD 80

Limits: 50-150

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel
Batch number: 111450031A
Chlorobenzene Orthoterphenyl

6296055	74	86
Blank	101	95
LCS	92	100
LCSD	84	94

Limits: 28-152 52-131

Analysis Name: 19a Alcohols by 8015B
Batch number: 111450035A
Acetone

6296036 73
6296042 70
6296043 72
6296045 69
6296046 70
6296047 70
6296048 74
6296049 76
6296051 68
6296054 68
Blank 87
LCS 86
MS 74
MSD 76

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 11/04/11 at 11:53 AM

Group Number: 1248215

Surrogate Quality Control

Batch number: 111480002A

	Chlorobenzene	Orthoterphenyl
6296042	86	106
6296043	87	101
6296045	74	100
6296046	56	81
6296047	85	98
6296048	81	93
6296049	97	107
6296051	55	89
6296054	70	114
Blank	83	94
LCS	86	97
MS	81	93
MSD	97	107

Limits: 37-125 47-145

Analysis Name: 20a Terphenyls by 8015B

Batch number: 111510027A
n-Triacontane-d62

6296036	92
6296042	110
6296043	159*
6296045	97
6296046	94
6296047	117
6296048	151*
6296049	130
6296051	77
6296054	108
Blank	92
LCS	94
MS	151*
MSD	130

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel

Batch number: 111570011A

	Chlorobenzene	Orthoterphenyl
6296036	72	89
Blank	77	93
LCS	89	95
MS	91	113
MSD	86	103

Limits: 37-125 47-145

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										VOCs		SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels ‡ Moisture by EPA 160.3 will be performed on soil in 16 oz jar collected from the same interval from which Encores were collected Sample Signature: <i>AW</i> 5-23-11							*Metals EPA 8010/8200/8717-A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PHS 8270 SM	PCBs/PCTs EPA 8082	*Dieldrin/EPA 1813B	*Permethrin EPA 314.0	*Heptachlor EPA 7109	*PAH EPA 8041/8060/8	Residue Confirmation by EPA 8050 (10%)	VOCs EPA 8260B 8	1,4-Dioxane EPA 8260/8261 8	TPH/GRO EPA 8015B 8	*TPH/LEH EPA 8015B 10d	*Nitrate EPA 300.0	*Formaldehyde EPA 8315A	*N,N-DMA EPA 1625C	*Tergetics EPA 8330A	*Cyanide EPA 8012B	*Terphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohols EPA 8015B		
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																								
SL-084-SA5DN-SB-4.5	5/23/11	0925	SOIL	NONE	4-Encores																								
SL-084-SA5DN-SB-4.0-5.0	5/23/11	0930	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X																
SL-089-SA5DN-SB-4.5	5/23/11	1020	SOIL	NONE	5-Encores																								
SL-089-SA5DN-SB-4.0-5.0	5/23/11	1025	SOIL	NONE	4-16 oz jars	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X					
SL-081-SA5DN-SB-4.5	5/23/11	1300	SOIL	NONE	5-Encores																								
SL-081-SA5DN-SB-4.0-5.0	5/23/11	1310	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X																
SL-081-SA5DN-SB-9.0-10.0	5/23/11	1315	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X																
SL-075-SA5DN-SB-4.5	5/23/11	1535	SOIL	NONE	4-Encores																								
SL-075-SA5DN-SB-4.0-5.0	5/23/11	1540	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X																
SL-075-SA5DN-SB-9.0-10.0	5/23/11	1545	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X																
TB-052311	5/23/11	0600	WATER	HCl	4-40 mL VOA VIALS																								
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																				TRIP BLANK					
		05/23/2011 / 1700																						Laboratory:					
Received by: (Signature)		Date/Time		Airbill No.(s)																				Lancaster Laboratories, Inc.					
<i>JA</i>		5/24/11 10:40		8895 1441 7961, 7994, 8008, 7972, 7983																									

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS				SS ONLY	SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes			
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels § Moisture by EPA 100.3 will be performed on soil in 15 oz jar collected from the same interval from which Encores were collected							Metals EPA 8010/8208/7471A	Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCB/PCBTs EPA 8082	Organophosphates EPA 1631B	Perchlorate EPA 314.0	Hex. Chrom. EPA 7189	NH EPA 8040/8040B	Pesticides EPA 8061A (all) as per label	Herbicides EPA 8151 (all) as per label	TPH/EFH EPA 8015B Mod	Nitrate EPA 300.0	Formaldehyde EPA 8151A	NHMA EPA 1625C	Enthalpic EPA 8300A		Cyanide EPA 8012B	Terphenyls EPA 8015B	Glycols EPA 8015B
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																				
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	12-1 liter ambers			X	X	X				X	X	X				X	X		X		
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NaOH	1-500 mL glass																	X			
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-250 mL glass													X							
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-500 mL poly		X				X	X	X												
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HNO3	1-500 mL poly	X																			
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HCl	2-40 mL vial																				X
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	4-40 mL vial												X						X		
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																				Laboratory:	
		05/23/2011 / 1700																						Lancaster Laboratories, Inc.	
Received by: (Signature)		Date/Time		Airbill No.(s)																					
		5/23/2011		8695 1441 7961, 7994, 8008, 7972, 7983																					

18013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS										SS ONLY		SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels § Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Enclones were collected						*Metals EPA 8010/8270/8471/1A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 B/H	*PCB/PCP's EPA 8082	*Dioxin/FURF EPA 1613B	*Perchlorate EPA 314.0	*Mer Chroms EPA 7199	*H EPA 9045/9000/05	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8161 (surface soil only)	*Methyl Mercury EPA Method 1631	*Organotin NOAA Status 7 trace	*Formaldehyde EPA 8315A	*HNMAs EPA 1625C	*Energolites EPA 8330A	*Cyanide EPA 8012B	*Terphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohols EPA 8015B				
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																							
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Poly											X												
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Jars												X											
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	3-16 oz. Jars	X	X	X	X	X	X	X	X	X	X													
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Poly											X												
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Jars												X											
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X												
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X												
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																				Laboratory:				
		05/23/2011 / 1700																						Lancaster Laboratories, Inc.				
Received by: (Signature)		Date/Time		Airbill No.(s)																								
		5/24/2011		8695 1441 7961, 7994, 8008, 7972, 7983																								

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Tuesday, May 24, 2011 2:44 PM
To: Nicole Maljovec
Cc: Bloisa, Peggy
Subject: Corrections for SSFL COC 5.23.11

Attachments: COC_05_23_11_sediment(1).xlsx



COC_05_23_11_se
diment(1).xlsx ...

Hi Nicole

Now that the dust has settled, Peggy and I have found my mistakes from yesterday. I have attached new updated COCs. I have highlighted the changes in red or yellow. These include:

- 1) SED-035-SIV-SD on the first two lines of the "Sediment Hole" COC should be SED-035-SIV-SDMS. The are the MS/MSD sample.
- 2) DUP01-SIV-SD should be DUP03-SIV-QC-052311
- 3) FB07-SIV-SS-052311 should be FB08-SIV-052311
- 4) For the COC starting with the sample name SL-015-SA5DN-SS-0.0-0.5, SVOCs and PCBs should only be analyzed from the sleeves and not from the jars.
- 5) The 6-40mL vials for the equipment blank will ship today.

Thank you !!

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM		SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS										SS ONLY	SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes Amended COC
NOTES: *Primary Analytes as indicated on sample labels **Secondary Analytes as indicated on sample labels \$ Moisture by EPA 180.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected																												
Samplers Signatures:																												
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metal EPA 8010/60208/2471A	*Fluoride EPA 300.0	SVOCS EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*PH EPA 8045C/8040B	Pesticide Confirmation by EPA 8850 (10%)	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	*TPHEPH EPA 8015B Mod.	*Nitrates EPA 300.0	*Formaldehyde EPA 8315A	*n-NDMA EPA 1025C	*Energetics EPA 8330A	*Cyanide EPA 8012B	*Terphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohols EPA 8015B			
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	1-SS sleeve			X	X																			
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	1-SS sleeve			X	X																			
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X												
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-SS sleeve			X	X																			
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	1-SS sleeve			X	X																			
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	1-SS sleeve			X	X																			
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	4-16 oz jar	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	MS/MSD		
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	2-SS sleeve			X	X																	MS/MSD		
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	1-SS sleeve			X	X																			
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X												
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-SS sleeve			X	X																			
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X												
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-SS sleeve			X	X																			
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	1-SS sleeve			X	X																			
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)																						Laboratory:		
		05/23/2011 / 1700																								Lancaster Laboratories, Inc.		
Received by: (Signature)		Date/Time		Airbill No.(s)																								
				8695 1441 7961, 7994, 8008,7972, 7983																								



July 28, 2011

Mr. Todd Burgesser
CDM
555 17th Street, Suite 1100
Denver, CO 80202

Dear Mr. Burgesser:

I am writing to inform you of revised analytical reports that are being issued for the following:

Project No. SSFL Area IV Collocated Soil Sampling

Group No. 1248215

SDG. No.: DE159

LLI Sample No.	Client Sample Identification	Collection Date
6296036	SL-089-SA5DN-SB-4.0-5.0 Soil	05/23/2011
6296042	SL-015-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296043	SL-016-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296044	SL-017-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296045	SL-019-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296047	SL-022-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296048	SL-022-SA5DN-SS-0.0-0.5MS Soil	05/23/2011
6296049	SL-022-SA5DN-SS-0.0-0.5MSD Soil	05/23/2011
6296051	SL-023-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296054	DUP05-SA5DN-QC-052311 Soil	05/23/2011

The correction to the data affects the Formaldehyde in Solids analysis only.

The LCS was out of specification at 76% (window 80-126%) for the first trial. The samples were re-extracted and reanalyzed on day 10, 3 days past the project holding time and the LCS recovered within the window. Due to analyst error, the re-extracted trial was reported although the project holding time of 7 days was not met. This mistake was caught during the data package review.

Per your request, the data is being reported from the first trial with a comment regarding the LCS and second trial confirmation.

The revised analytical report reflects this correction and is enclosed.

Page 2
Mr. Todd Burgesser
July 28, 2011

You are a valued client and we apologize for any inconvenience that this incident may have caused. If you have any questions or require further assistance, please call me at 717-656-2300, Ext. 1933. We appreciate your business and look forward to continuing to serve your laboratory needs.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah Snyder". The signature is fluid and cursive, with the first name "Sarah" being more prominent than the last name "Snyder".

Sarah Snyder
Senior Specialist
Pesticide Residue Analysis

SS/mcs
Enclosures

cc: Nicole Maljovec



November 4, 2011

Mr. Todd Burgesser
CDM
555 17th Street Suite 1100
Denver, CO 80202

Dear Mr. Burgesser:

I am writing to inform you of revised analytical reports that are being issued for the following:

Project No. SSFL Area IV Collocated Soil Sampling

Group No. 1248215

SDG No.: DE159

LLI Sample No.	Client Sample Identification	Collection Date
6296056	SED-035-SIV-SD Sediment	5/23/11

In response to your inquiry regarding the moisture result, it was determined that the percent moisture value was incorrect when initially reported. After running the sample a second time in duplicate, the value was determined to be significantly higher than originally reported. We are sorry for the inconvenience and have corrected the data to reflect the revised moisture value.

The revised analytical report reflects this correction and is enclosed.

You are a valued client and we apologize for any inconvenience that this incident may have caused. If you have any questions or require further assistance, please call me at 717-656-2300, Ext. 1225. We appreciate your business and look forward to continuing to serve your laboratory needs.

Sincerely,

Chad Wettig
Chemist/Group Leader
Sample Support

CW/mcs
Enclosures

cc: Nicole L. Maljovec

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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