

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0691 SDG#: DX021-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	8.2	0.50	0.50	1

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0691 SDG#: DX021-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0145 U	0.0145	1.09	1
11031	12378-PeCDD	40321-76-4	0.0346 JBQ	0.0166	5.45	1
11031	123478-HxCDD	39227-28-6	0.0471 JBQ	0.0176	5.45	1
11031	123678-HxCDD	57653-85-7	0.204 JB	0.0182	5.45	1
11031	123789-HxCDD	19408-74-3	0.197 JB	0.0174	5.45	1
11031	1234678-HpCDD	35822-46-9	5.23 JB	0.0326	5.45	1
11031	OCDD	3268-87-9	83.4 B	0.0270	10.9	1
11031	2378-TCDF	51207-31-9	0.0321 JBQ	0.0144	1.09	1
11031	12378-PeCDF	57117-41-6	0.0757 JB	0.00773	5.45	1
11031	23478-PeCDF	57117-31-4	0.137 JBQ	0.00784	5.45	1
11031	123478-HxCDF	70648-26-9	0.163 JB	0.0132	5.45	1
11031	123678-HxCDF	57117-44-9	0.143 JB	0.0107	5.45	1
11031	123789-HxCDF	72918-21-9	0.0937 JB	0.0159	5.45	1
11031	234678-HxCDF	60851-34-5	0.241 JB	0.0124	5.45	1
11031	1234678-HpCDF	67562-39-4	0.955 JB	0.0101	5.45	1
11031	1234789-HpCDF	55673-89-7	0.145 JB	0.0186	5.45	1
11031	OCDF	39001-02-0	1.53 JB	0.0236	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	50	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0691 SDG#: DX021-01

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

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0691 SDG#: DX021-01

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 16:11	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DDP13 SDG#: DX021-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.8	0.50	0.50	1

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

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DDP13 SDG#: DX021-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0165 U	0.0165	1.15	1
11031	12378-PeCDD	40321-76-4	0.0649 JBQ	0.0263	5.73	1
11031	123478-HxCDD	39227-28-6	0.0401 JBQ	0.0172	5.73	1
11031	123678-HxCDD	57653-85-7	0.287 JB	0.0173	5.73	1
11031	123789-HxCDD	19408-74-3	0.447 JB	0.0174	5.73	1
11031	1234678-HpCDD	35822-46-9	1.03 JB	0.0240	5.73	1
11031	OCDD	3268-87-9	8.45 JB	0.0242	11.5	1
11031	2378-TCDF	51207-31-9	0.0368 JB	0.0216	1.15	1
11031	12378-PeCDF	57117-41-6	0.334 JBQ	0.00952	5.73	1
11031	23478-PeCDF	57117-31-4	0.143 JBQ	0.0106	5.73	1
11031	123478-HxCDF	70648-26-9	0.160 JB	0.0174	5.73	1
11031	123678-HxCDF	57117-44-9	0.115 JBQ	0.0138	5.73	1
11031	123789-HxCDF	72918-21-9	0.512 JB	0.0242	5.73	1
11031	234678-HxCDF	60851-34-5	0.237 JBQ	0.0162	5.73	1
11031	1234678-HpCDF	67562-39-4	0.677 JB	0.0109	5.73	1
11031	1234789-HpCDF	55673-89-7	0.139 JBQ	0.0231	5.73	1
11031	OCDF	39001-02-0	0.898 JBQ	0.0275	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	66	35 - 197

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DDP13 SDG#: DX021-02FD

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

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

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DDP13 SDG#: DX021-02FD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 17:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50	1

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

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0249 JBQ	0.0191	1.13	1
11031	12378-PeCDD	40321-76-4	0.0742 JB	0.0274	5.64	1
11031	123478-HxCDD	39227-28-6	0.0294 JBQ	0.0219	5.64	1
11031	123678-HxCDD	57653-85-7	0.362 JB	0.0227	5.64	1
11031	123789-HxCDD	19408-74-3	0.510 JBQ	0.0223	5.64	1
11031	1234678-HpCDD	35822-46-9	2.54 JB	0.0331	5.64	1
11031	OCDD	3268-87-9	25.4 B	0.0332	11.3	1
11031	2378-TCDF	51207-31-9	0.0498 JBQ	0.0242	1.13	1
11031	12378-PeCDF	57117-41-6	0.294 JB	0.0125	5.64	1
11031	23478-PeCDF	57117-31-4	0.100 JBQ	0.0120	5.64	1
11031	123478-HxCDF	70648-26-9	0.0520 JB	0.0181	5.64	1
11031	123678-HxCDF	57117-44-9	0.0857 JB	0.0166	5.64	1
11031	123789-HxCDF	72918-21-9	0.445 JB	0.0220	5.64	1
11031	234678-HxCDF	60851-34-5	0.0838 JBQ	0.0170	5.64	1
11031	1234678-HpCDF	67562-39-4	0.428 JB	0.0140	5.64	1
11031	1234789-HpCDF	55673-89-7	0.0739 JBQ	0.0249	5.64	1
11031	OCDF	39001-02-0	0.999 JB	0.0328	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Page 3 of 4

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03BKG

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

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

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

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Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 18:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50	1

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

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.7	B	0.0233	1
11031	12378-PeCDD	40321-76-4	116	B	0.0729	1
11031	123478-HxCDD	39227-28-6	117	B	0.0677	1
11031	123678-HxCDD	57653-85-7	119	B	0.0646	1
11031	123789-HxCDD	19408-74-3	120	B	0.0448	1
11031	1234678-HpCDD	35822-46-9	117	B	0.0891	1
11031	OCDD	3268-87-9	250	B	0.0648	1
11031	2378-TCDF	51207-31-9	25.1	B	0.0501	1
11031	12378-PeCDF	57117-41-6	120	B	0.0288	1
11031	23478-PeCDF	57117-31-4	118	B	0.0374	1
11031	123478-HxCDF	70648-26-9	112	B	0.0939	1
11031	123678-HxCDF	57117-44-9	114	B	0.0772	1
11031	123789-HxCDF	72918-21-9	113	B	0.0612	1
11031	234678-HxCDF	60851-34-5	113	B	0.0595	1
11031	1234678-HpCDF	67562-39-4	115	B	0.0781	1
11031	1234789-HpCDF	55673-89-7	115	B	0.0916	1
11031	OCDF	39001-02-0	235	B	0.0833	1

The recoveries of several labeled compounds were low in this sample. However, the recovery of all of the spiked, native compounds were within specifications.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	29	25 - 181
13C12-123478-HxCDD	24	32 - 141
13C12-123678-HxCDD	25	28 - 130
13C12-123789-HxCDD	37	28 - 130
13C12-1234678-HpCDD	34	23 - 140
13C12-OCDD	34	17 - 157
13C12-2378-TCDF	30	24 - 169
13C12-12378-PeCDF	34	24 - 185
13C12-23478-PeCDF	25	21 - 178
13C12-123478-HxCDF	21	26 - 152
13C12-123678-HxCDF	25	26 - 123
13C12-234678-HxCDF	32	28 - 136
13C12-123789-HxCDF	37	29 - 147
13C12-1234678-HpCDF	30	28 - 143
13C12-1234789-HpCDF	31	26 - 138
13C12-OCDF	27	17 - 157
13C12-1278-TCDD (CRS)	18	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 19:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
EPA 160.3 modified						
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50	1

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

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.8	B	0.0231	1.13	1
11031	12378-PeCDD	40321-76-4	118	B	0.0423	5.64	1
11031	123478-HxCDD	39227-28-6	121	B	0.0344	5.64	1
11031	123678-HxCDD	57653-85-7	118	B	0.0351	5.64	1
11031	123789-HxCDD	19408-74-3	118	B	0.0344	5.64	1
11031	1234678-HpCDD	35822-46-9	125	B	0.0668	5.64	1
11031	OCDD	3268-87-9	314	B	0.0564	11.3	1
11031	2378-TCDF	51207-31-9	24.0	B	0.0312	1.13	1
11031	12378-PeCDF	57117-41-6	120	B	0.0174	5.64	1
11031	23478-PeCDF	57117-31-4	119	B	0.0173	5.64	1
11031	123478-HxCDF	70648-26-9	114	B	0.0429	5.64	1
11031	123678-HxCDF	57117-44-9	114	B	0.0386	5.64	1
11031	123789-HxCDF	72918-21-9	114	B	0.0499	5.64	1
11031	234678-HxCDF	60851-34-5	113	B	0.0410	5.64	1
11031	1234678-HpCDF	67562-39-4	115	B	0.0430	5.64	1
11031	1234789-HpCDF	55673-89-7	114	B	0.0598	5.64	1
11031	OCDF	39001-02-0	231	B	0.0405	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MSD

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

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

CDM Federal Programs Corp.
14420 Albemarle Point Place
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Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0645 SDG#: DX021-03MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 19:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163900
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DEB15 SDG#: DX021-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	3.48	U	3.48	2.30	1
10915	12378-PeCDD	40321-76-4	2.02	JB	1.28	11.5	1
10915	123478-HxCDD	39227-28-6	0.514	JB	0.440	11.5	1
10915	123678-HxCDD	57653-85-7	1.01	JB	0.449	11.5	1
10915	123789-HxCDD	19408-74-3	0.622	JB	0.496	11.5	1
10915	1234678-HpCDD	35822-46-9	1.77	JBQ	0.456	11.5	1
10915	OCDD	3268-87-9	7.38	JB	0.505	23.0	1
10915	2378-TCDF	51207-31-9	0.355	U	0.355	2.30	1
10915	12378-PeCDF	57117-41-6	0.591	JB	0.334	11.5	1
10915	23478-PeCDF	57117-31-4	0.623	JB	0.289	11.5	1
10915	123478-HxCDF	70648-26-9	1.09	JBQ	0.295	11.5	1
10915	123678-HxCDF	57117-44-9	0.846	JBQ	0.280	11.5	1
10915	123789-HxCDF	72918-21-9	0.654	JB	0.304	11.5	1
10915	234678-HxCDF	60851-34-5	1.13	JB	0.272	11.5	1
10915	1234678-HpCDF	67562-39-4	3.04	JB	0.258	11.5	1
10915	1234789-HpCDF	55673-89-7	0.663	JB	0.290	11.5	1
10915	OCDF	39001-02-0	1.71	JB	0.506	23.0	1

The recoveries of several labeled compounds were outside QC limits in this sample and the blank and OPR associated with this sample. The sample was re-extracted outside the project specified holding time with all labeled compound recoveries within QC specification. Comparable native compound results were observed between the two extractions.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	3	25 - 164
13C12-12378-PeCDD	15	25 - 181
13C12-123478-HxCDD	24	32 - 141
13C12-123678-HxCDD	23	28 - 130
13C12-123789-HxCDD	21	28 - 130
13C12-1234678-HpCDD	30	23 - 140
13C12-OCDD	29	17 - 157
13C12-2378-TCDF	33	24 - 169
13C12-12378-PeCDF	29	24 - 185
13C12-23478-PeCDF	34	21 - 178
13C12-123478-HxCDF	27	26 - 152
13C12-123678-HxCDF	27	26 - 123
13C12-234678-HxCDF	29	28 - 136
13C12-123789-HxCDF	29	29 - 147
13C12-1234678-HpCDF	29	28 - 143
13C12-1234789-HpCDF	29	26 - 138
13C12-OCDF	28	17 - 157
13C12-1278-TCDD (CRS)	9	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163900
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

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14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

DEB15 SDG#: DX021-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
E	Exceeds calibration range					
C	Confirmed quantitation on secondary GC column					
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	10362001	12/30/2010 17:25	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	10362001	12/28/2010 06:30	Ginelle L Haines	1



Analysis Report

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Page 1 of 4

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0745 SDG#: DX021-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.1	0.50	0.50	1

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

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0745 SDG#: DX021-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0234 U	0.0234	1.09	1
11031	12378-PeCDD	40321-76-4	0.0864 JBQ	0.0310	5.44	1
11031	123478-HxCDD	39227-28-6	0.112 JB	0.0271	5.44	1
11031	123678-HxCDD	57653-85-7	0.321 JBQ	0.0283	5.44	1
11031	123789-HxCDD	19408-74-3	0.285 JB	0.0271	5.44	1
11031	1234678-HpCDD	35822-46-9	5.76 B	0.0404	5.44	1
11031	OCDD	3268-87-9	58.1 B	0.0412	10.9	1
11031	2378-TCDF	51207-31-9	0.0301 U	0.0301	1.09	1
11031	12378-PeCDF	57117-41-6	0.164 JBQ	0.0150	5.44	1
11031	23478-PeCDF	57117-31-4	0.241 JBQ	0.0159	5.44	1
11031	123478-HxCDF	70648-26-9	0.177 JB	0.0220	5.44	1
11031	123678-HxCDF	57117-44-9	0.135 JBQ	0.0183	5.44	1
11031	123789-HxCDF	72918-21-9	0.231 JB	0.0260	5.44	1
11031	234678-HxCDF	60851-34-5	0.247 JBQ	0.0212	5.44	1
11031	1234678-HpCDF	67562-39-4	1.17 JB	0.0161	5.44	1
11031	1234789-HpCDF	55673-89-7	0.246 JB	0.0285	5.44	1
11031	OCDF	39001-02-0	2.06 JB	0.0337	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0745 SDG#: DX021-05

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

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0745 SDG#: DX021-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 20:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0791 SDG#: DX021-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.2	0.50	0.50	1

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

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0791 SDG#: DX021-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0237 JBQ	0.0225	1.10	1
11031	12378-PeCDD	40321-76-4	0.119 JBQ	0.0322	5.51	1
11031	123478-HxCDD	39227-28-6	0.126 JB	0.0326	5.51	1
11031	123678-HxCDD	57653-85-7	0.557 JB	0.0347	5.51	1
11031	123789-HxCDD	19408-74-3	0.353 JB	0.0331	5.51	1
11031	1234678-HpCDD	35822-46-9	14.7 B	0.0655	5.51	1
11031	OCDD	3268-87-9	179 B	0.0656	11.0	1
11031	2378-TCDF	51207-31-9	0.0249 U	0.0249	1.10	1
11031	12378-PeCDF	57117-41-6	0.0980 JB	0.0144	5.51	1
11031	23478-PeCDF	57117-31-4	0.144 JB	0.0139	5.51	1
11031	123478-HxCDF	70648-26-9	0.116 JB	0.0216	5.51	1
11031	123678-HxCDF	57117-44-9	0.128 JB	0.0195	5.51	1
11031	123789-HxCDF	72918-21-9	0.170 JBQ	0.0240	5.51	1
11031	234678-HxCDF	60851-34-5	0.162 JB	0.0206	5.51	1
11031	1234678-HpCDF	67562-39-4	1.71 JB	0.0163	5.51	1
11031	1234789-HpCDF	55673-89-7	0.194 JB	0.0227	5.51	1
11031	OCDF	39001-02-0	4.77 JB	0.0316	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0791 SDG#: DX021-06

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

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0791 SDG#: DX021-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 21:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D7505 SDG#: DX021-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.1	0.50	0.50	1

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

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D7505 SDG#: DX021-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0679 JBQ	0.0182	1.06	1
11031	12378-PeCDD	40321-76-4	0.518 JB	0.0419	5.32	1
11031	123478-HxCDD	39227-28-6	0.909 JB	0.0286	5.32	1
11031	123678-HxCDD	57653-85-7	2.30 JB	0.0291	5.32	1
11031	123789-HxCDD	19408-74-3	2.31 JB	0.0298	5.32	1
11031	1234678-HpCDD	35822-46-9	54.7 B	0.0776	5.32	1
11031	OCDD	3268-87-9	502 B	0.0634	10.6	1
11031	2378-TCDF	51207-31-9	0.214 JB	0.0339	1.06	1
11031	12378-PeCDF	57117-41-6	0.378 JB	0.0142	5.32	1
11031	23478-PeCDF	57117-31-4	0.435 JB	0.0145	5.32	1
11031	123478-HxCDF	70648-26-9	0.629 JB	0.0263	5.32	1
11031	123678-HxCDF	57117-44-9	0.613 JB	0.0232	5.32	1
11031	123789-HxCDF	72918-21-9	0.467 JB	0.0317	5.32	1
11031	234678-HxCDF	60851-34-5	0.706 JB	0.0258	5.32	1
11031	1234678-HpCDF	67562-39-4	9.65 B	0.0234	5.32	1
11031	1234789-HpCDF	55673-89-7	0.847 JB	0.0361	5.32	1
11031	OCDF	39001-02-0	25.3 B	0.0284	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D7505 SDG#: DX021-07

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

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D7505 SDG#: DX021-07

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 22:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0705 SDG#: DX021-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	7.1	0.50	0.50	1

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

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0705 SDG#: DX021-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0969 JB	0.0178	1.08	1
11031	12378-PeCDD	40321-76-4	0.290 JB	0.0311	5.38	1
11031	123478-HxCDD	39227-28-6	0.443 JB	0.0297	5.38	1
11031	123678-HxCDD	57653-85-7	0.946 JB	0.0310	5.38	1
11031	123789-HxCDD	19408-74-3	0.884 JB	0.0301	5.38	1
11031	1234678-HpCDD	35822-46-9	21.8 B	0.0487	5.38	1
11031	OCDD	3268-87-9	179 B	0.0531	10.8	1
11031	2378-TCDF	51207-31-9	0.220 JB	0.0263	1.08	1
11031	12378-PeCDF	57117-41-6	0.247 JB	0.0121	5.38	1
11031	23478-PeCDF	57117-31-4	0.329 JB	0.0135	5.38	1
11031	123478-HxCDF	70648-26-9	0.378 JB	0.0250	5.38	1
11031	123678-HxCDF	57117-44-9	0.373 JB	0.0202	5.38	1
11031	123789-HxCDF	72918-21-9	0.236 JB	0.0322	5.38	1
11031	234678-HxCDF	60851-34-5	0.501 JB	0.0237	5.38	1
11031	1234678-HpCDF	67562-39-4	3.96 JB	0.0167	5.38	1
11031	1234789-HpCDF	55673-89-7	0.478 JB	0.0318	5.38	1
11031	OCDF	39001-02-0	7.92 JB	0.0316	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	50	17 - 157
13C12-1278-TCDD (CRS)	67	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0705 SDG#: DX021-08

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

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0705 SDG#: DX021-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 02:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8505 SDG#: DX021-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

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

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8505 SDG#: DX021-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0844 JBQ	0.0232	1.07	1
11031	12378-PeCDD	40321-76-4	0.208 JB	0.0683	5.36	1
11031	123478-HxCDD	39227-28-6	0.301 JBQ	0.0415	5.36	1
11031	123678-HxCDD	57653-85-7	1.32 JB	0.0437	5.36	1
11031	123789-HxCDD	19408-74-3	0.836 JB	0.0432	5.36	1
11031	1234678-HpCDD	35822-46-9	37.3 B	0.0943	5.36	1
11031	OCDD	3268-87-9	432 B	0.0650	10.7	1
11031	2378-TCDF	51207-31-9	0.197 JB	0.0430	1.07	1
11031	12378-PeCDF	57117-41-6	0.774 JB	0.0205	5.36	1
11031	23478-PeCDF	57117-31-4	0.517 JB	0.0200	5.36	1
11031	123478-HxCDF	70648-26-9	0.720 JB	0.0294	5.36	1
11031	123678-HxCDF	57117-44-9	0.939 JB	0.0270	5.36	1
11031	123789-HxCDF	72918-21-9	0.353 JB	0.0331	5.36	1
11031	234678-HxCDF	60851-34-5	0.544 JB	0.0278	5.36	1
11031	1234678-HpCDF	67562-39-4	7.20 B	0.0323	5.36	1
11031	1234789-HpCDF	55673-89-7	0.641 JB	0.0417	5.36	1
11031	OCDF	39001-02-0	16.1 B	0.0422	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	59	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	68	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8505 SDG#: DX021-09

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

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8505 SDG#: DX021-09

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 03:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8705 SDG#: DX021-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.5	0.50	0.50	1

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

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8705 SDG#: DX021-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0365 JB	0.0227	1.09	1
11031	12378-PeCDD	40321-76-4	0.0840 JB	0.0467	5.46	1
11031	123478-HxCDD	39227-28-6	0.163 JBQ	0.0416	5.46	1
11031	123678-HxCDD	57653-85-7	0.983 JB	0.0426	5.46	1
11031	123789-HxCDD	19408-74-3	0.485 JB	0.0414	5.46	1
11031	1234678-HpCDD	35822-46-9	30.1 B	0.0838	5.46	1
11031	OCDD	3268-87-9	322 B	0.0683	10.9	1
11031	2378-TCDF	51207-31-9	0.196 JB	0.0366	1.09	1
11031	12378-PeCDF	57117-41-6	0.489 JB	0.0191	5.46	1
11031	23478-PeCDF	57117-31-4	0.386 JB	0.0183	5.46	1
11031	123478-HxCDF	70648-26-9	0.462 JB	0.0252	5.46	1
11031	123678-HxCDF	57117-44-9	0.319 JB	0.0236	5.46	1
11031	123789-HxCDF	72918-21-9	0.223 JB	0.0289	5.46	1
11031	234678-HxCDF	60851-34-5	0.426 JB	0.0249	5.46	1
11031	1234678-HpCDF	67562-39-4	4.08 JB	0.0553	5.46	1
11031	1234789-HpCDF	55673-89-7	0.527 JBQ	0.0763	5.46	1
11031	OCDF	39001-02-0	10.4 JB	0.0502	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	69	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8705 SDG#: DX021-10

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

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D8705 SDG#: DX021-10

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 04:39	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



Analysis Report

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Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9505 SDG#: DX021-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1

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

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9505 SDG#: DX021-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.282 JB	0.0499	1.05	1
11031	12378-PeCDD	40321-76-4	0.369 JBQ	0.0901	5.26	1
11031	123478-HxCDD	39227-28-6	0.492 JBQ	0.0721	5.26	1
11031	123678-HxCDD	57653-85-7	1.84 JB	0.0747	5.26	1
11031	123789-HxCDD	19408-74-3	1.04 JB	0.0712	5.26	1
11031	1234678-HpCDD	35822-46-9	54.9 B	0.151	5.26	1
11031	OCDD	3268-87-9	574 B	0.117	10.5	1
11031	2378-TCDF	51207-31-9	0.146 JBQ	0.0601	1.05	1
11031	12378-PeCDF	57117-41-6	0.515 JB	0.0322	5.26	1
11031	23478-PeCDF	57117-31-4	0.503 JB	0.0312	5.26	1
11031	123478-HxCDF	70648-26-9	0.509 JB	0.0508	5.26	1
11031	123678-HxCDF	57117-44-9	0.603 JB	0.0458	5.26	1
11031	123789-HxCDF	72918-21-9	0.532 JB	0.0553	5.26	1
11031	234678-HxCDF	60851-34-5	0.632 JB	0.0492	5.26	1
11031	1234678-HpCDF	67562-39-4	7.39 B	0.0568	5.26	1
11031	1234789-HpCDF	55673-89-7	0.995 JBQ	0.0846	5.26	1
11031	OCDF	39001-02-0	17.5 B	0.0794	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	68	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9505 SDG#: DX021-11

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

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9505 SDG#: DX021-11

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 05:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



Analysis Report

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Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9105 SDG#: DX021-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	8.1	0.50	0.50	1

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

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9105 SDG#: DX021-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0431 JBQ	0.0108	1.09	1
11031	12378-PeCDD	40321-76-4	0.0360 U	0.0360	5.44	1
11031	123478-HxCDD	39227-28-6	0.169 JB	0.0264	5.44	1
11031	123678-HxCDD	57653-85-7	0.766 JB	0.0269	5.44	1
11031	123789-HxCDD	19408-74-3	0.414 JB	0.0237	5.44	1
11031	1234678-HpCDD	35822-46-9	17.7 B	0.0470	5.44	1
11031	OCDD	3268-87-9	179 B	0.0391	10.9	1
11031	2378-TCDF	51207-31-9	0.198 JB	0.0229	1.09	1
11031	12378-PeCDF	57117-41-6	0.344 JBQ	0.0137	5.44	1
11031	23478-PeCDF	57117-31-4	0.333 JB	0.0115	5.44	1
11031	123478-HxCDF	70648-26-9	0.354 JB	0.0205	5.44	1
11031	123678-HxCDF	57117-44-9	0.317 JB	0.0311	5.44	1
11031	123789-HxCDF	72918-21-9	0.212 JB	0.0210	5.44	1
11031	234678-HxCDF	60851-34-5	0.438 JBQ	0.0185	5.44	1
11031	1234678-HpCDF	67562-39-4	3.16 JB	0.0349	5.44	1
11031	1234789-HpCDF	55673-89-7	0.430 JBQ	0.0474	5.44	1
11031	OCDF	39001-02-0	5.66 JB	0.0266	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	56	32 - 141
13C12-123678-HxCDD	55	28 - 130
13C12-123789-HxCDD	60	28 - 130
13C12-1234678-HpCDD	57	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	51	24 - 185
13C12-23478-PeCDF	56	21 - 178
13C12-123478-HxCDF	53	26 - 152
13C12-123678-HxCDF	37	26 - 123
13C12-234678-HxCDF	57	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	45	17 - 157
13C12-1278-TCDD (CRS)	56	35 - 197

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Page 3 of 4

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9105 SDG#: DX021-12

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

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

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D9105 SDG#: DX021-12

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/16/2011 16:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0345 SDG#: DX021-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	7.2	0.50	0.50	1

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

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0345 SDG#: DX021-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0154 U	0.0154	1.08	1
11031	12378-PeCDD	40321-76-4	0.0932 JB	0.0265	5.39	1
11031	123478-HxCDD	39227-28-6	0.0843 JB	0.0298	5.39	1
11031	123678-HxCDD	57653-85-7	0.358 JB	0.0297	5.39	1
11031	123789-HxCDD	19408-74-3	0.270 JB	0.0281	5.39	1
11031	1234678-HpCDD	35822-46-9	9.85 B	0.0506	5.39	1
11031	OCDD	3268-87-9	135 B	0.0464	10.8	1
11031	2378-TCDF	51207-31-9	0.0234 JB	0.0189	1.08	1
11031	12378-PeCDF	57117-41-6	0.0899 JBQ	0.0120	5.39	1
11031	23478-PeCDF	57117-31-4	0.296 JB	0.0145	5.39	1
11031	123478-HxCDF	70648-26-9	0.231 JB	0.0204	5.39	1
11031	123678-HxCDF	57117-44-9	0.187 JB	0.0179	5.39	1
11031	123789-HxCDF	72918-21-9	0.161 JB	0.0219	5.39	1
11031	234678-HxCDF	60851-34-5	0.303 JB	0.0184	5.39	1
11031	1234678-HpCDF	67562-39-4	1.96 JB	0.0161	5.39	1
11031	1234789-HpCDF	55673-89-7	0.212 JB	0.0240	5.39	1
11031	OCDF	39001-02-0	3.36 JB	0.0278	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	64	35 - 197

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0345 SDG#: DX021-13

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

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

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0345 SDG#: DX021-13

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 07:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0145 SDG#: DX021-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

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

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0145 SDG#: DX021-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0188 U	0.0188	1.07	1
11031	12378-PeCDD	40321-76-4	0.0245 U	0.0245	5.36	1
11031	123478-HxCDD	39227-28-6	0.0327 JB	0.0182	5.36	1
11031	123678-HxCDD	57653-85-7	0.117 JBQ	0.0191	5.36	1
11031	123789-HxCDD	19408-74-3	0.139 JB	0.0191	5.36	1
11031	1234678-HpCDD	35822-46-9	0.461 JB	0.0250	5.36	1
11031	OCDD	3268-87-9	1.36 JB	0.0345	10.7	1
11031	2378-TCDF	51207-31-9	0.0167 U	0.0167	1.07	1
11031	12378-PeCDF	57117-41-6	0.0412 JBQ	0.0101	5.36	1
11031	23478-PeCDF	57117-31-4	0.136 JB	0.0103	5.36	1
11031	123478-HxCDF	70648-26-9	0.155 JBQ	0.0175	5.36	1
11031	123678-HxCDF	57117-44-9	0.150 JB	0.0158	5.36	1
11031	123789-HxCDF	72918-21-9	0.110 JB	0.0228	5.36	1
11031	234678-HxCDF	60851-34-5	0.225 JB	0.0170	5.36	1
11031	1234678-HpCDF	67562-39-4	0.790 JB	0.0133	5.36	1
11031	1234789-HpCDF	55673-89-7	0.0998 JB	0.0221	5.36	1
11031	OCDF	39001-02-0	0.515 JB	0.0259	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	63	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0145 SDG#: DX021-14

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

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0145 SDG#: DX021-14

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 08:25	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0191 SDG#: DX021-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	17.0	0.50	0.50	1

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

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0191 SDG#: DX021-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0177 U	0.0177	1.20	1
11031	12378-PeCDD	40321-76-4	0.0381 JBQ	0.0261	6.02	1
11031	123478-HxCDD	39227-28-6	0.0352 JBQ	0.0178	6.02	1
11031	123678-HxCDD	57653-85-7	0.0810 JBQ	0.0184	6.02	1
11031	123789-HxCDD	19408-74-3	0.0829 JBQ	0.0173	6.02	1
11031	1234678-HpCDD	35822-46-9	0.665 JB	0.0272	6.02	1
11031	OCDD	3268-87-9	4.85 JB	0.0306	12.0	1
11031	2378-TCDF	51207-31-9	0.0215 JB	0.0175	1.20	1
11031	12378-PeCDF	57117-41-6	0.0615 JB	0.0111	6.02	1
11031	23478-PeCDF	57117-31-4	0.144 JB	0.0117	6.02	1
11031	123478-HxCDF	70648-26-9	0.169 JB	0.0170	6.02	1
11031	123678-HxCDF	57117-44-9	0.133 JB	0.0139	6.02	1
11031	123789-HxCDF	72918-21-9	0.140 JB	0.0196	6.02	1
11031	234678-HxCDF	60851-34-5	0.282 JB	0.0159	6.02	1
11031	1234678-HpCDF	67562-39-4	0.892 JB	0.0112	6.02	1
11031	1234789-HpCDF	55673-89-7	0.148 JB	0.0200	6.02	1
11031	OCDF	39001-02-0	0.700 JB	0.0295	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0191 SDG#: DX021-15

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

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D0191 SDG#: DX021-15

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 09:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3205 SDG#: DX021-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

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

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3205 SDG#: DX021-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.228 JB	0.0289	1.14	1
11031	12378-PeCDD	40321-76-4	1.40 JB	0.0530	5.72	1
11031	123478-HxCDD	39227-28-6	1.86 JB	0.0334	5.72	1
11031	123678-HxCDD	57653-85-7	4.48 JB	0.0348	5.72	1
11031	123789-HxCDD	19408-74-3	3.68 JB	0.0344	5.72	1
11031	1234678-HpCDD	35822-46-9	86.8 B	0.0896	5.72	1
11031	OCDD	3268-87-9	982 B	0.0714	11.4	1
11031	2378-TCDF	51207-31-9	0.556 JBQ	0.0564	1.14	1
11031	12378-PeCDF	57117-41-6	1.11 JB	0.0222	5.72	1
11031	23478-PeCDF	57117-31-4	1.23 JB	0.0214	5.72	1
11031	123478-HxCDF	70648-26-9	1.19 JB	0.0302	5.72	1
11031	123678-HxCDF	57117-44-9	1.12 JB	0.0270	5.72	1
11031	123789-HxCDF	72918-21-9	0.369 JB	0.0360	5.72	1
11031	234678-HxCDF	60851-34-5	1.46 JB	0.0289	5.72	1
11031	1234678-HpCDF	67562-39-4	14.6 B	0.0268	5.72	1
11031	1234789-HpCDF	55673-89-7	1.13 JB	0.0370	5.72	1
11031	OCDF	39001-02-0	43.1 B	0.0261	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3205 SDG#: DX021-16

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

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3205 SDG#: DX021-16

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 10:18	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1



Analysis Report

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Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3305 SDG#: DX021-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1

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

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3305 SDG#: DX021-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.103 JBQ	0.0315	1.06	1
11031	12378-PeCDD	40321-76-4	0.874 JBQ	0.0525	5.31	1
11031	123478-HxCDD	39227-28-6	1.21 JB	0.0339	5.31	1
11031	123678-HxCDD	57653-85-7	2.48 JB	0.0356	5.31	1
11031	123789-HxCDD	19408-74-3	2.01 JB	0.0350	5.31	1
11031	1234678-HpCDD	35822-46-9	45.6 B	0.0756	5.31	1
11031	OCDD	3268-87-9	407 B	0.0720	10.6	1
11031	2378-TCDF	51207-31-9	0.227 JB	0.0502	1.06	1
11031	12378-PeCDF	57117-41-6	0.460 JB	0.0242	5.31	1
11031	23478-PeCDF	57117-31-4	0.628 JBQ	0.0228	5.31	1
11031	123478-HxCDF	70648-26-9	0.741 JB	0.0300	5.31	1
11031	123678-HxCDF	57117-44-9	0.799 JB	0.0274	5.31	1
11031	123789-HxCDF	72918-21-9	0.217 JB	0.0343	5.31	1
11031	234678-HxCDF	60851-34-5	1.07 JB	0.0290	5.31	1
11031	1234678-HpCDF	67562-39-4	9.94 B	0.0299	5.31	1
11031	1234789-HpCDF	55673-89-7	0.643 JB	0.0398	5.31	1
11031	OCDF	39001-02-0	20.7 B	0.0351	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	71	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

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

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3305 SDG#: DX021-17*

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

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
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CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

Submitted: 12/14/2010 10:05

Reported: 02/01/2011 23:39

D3305 SDG#: DX021-17*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 11:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:39 PM

Group Number: 1225277

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10349162402B 28a Moisture Content by 160.3	Sample number(s): 6163903-6163904, 6163906-6163908, 6163912-6163913 100 80-120								

Batch number: 10364162402B 28a Moisture Content by 160.3	Sample number(s): 6163895-6163899, 6163901-6163902, 6163905, 6163909-6163911 100 80-120								
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Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 10362001	Sample number(s): 6163900								
2378-TCDD	2.81	1.76	2.00	pg/l	89		67-158		
12378-PeCDD	0.684 J	0.492	10.0	pg/l	96		70-142		
123478-HxCDD	0.485 J	0.235	10.0	pg/l	106		70-164		
123678-HxCDD	0.512 J	0.243	10.0	pg/l	104		76-134		
123789-HxCDD	0.483 J	0.269	10.0	pg/l	106		64-162		
1234678-HpCDD	1.35 J	0.246	10.0	pg/l	108		70-140		
OCDD	2.39 J	0.274	20.0	pg/l	118		78-144		
2378-TCDF	0.181 J	0.166	2.00	pg/l	95		75-158		
12378-PeCDF	0.474 J	0.125	10.0	pg/l	104		80-134		
23478-PeCDF	0.810 J	0.113	10.0	pg/l	102		68-160		
123478-HxCDF	0.599 J	0.136	10.0	pg/l	111		72-134		
123678-HxCDF	0.568 J	0.132	10.0	pg/l	113		84-130		
123789-HxCDF	0.637 J	0.143	10.0	pg/l	111		78-130		
234678-HxCDF	0.505 J	0.136	10.0	pg/l	109		70-156		
1234678-HpCDF	1.41 J	0.122	10.0	pg/l	116		82-122		
1234789-HpCDF	0.582 J	0.148	10.0	pg/l	117		78-138		
OCDF	1.43 J	0.269	20.0	pg/l	122		63-170		
Batch number: 10364001	Sample number(s): 6163895-6163899, 6163901-6163913								
2378-TCDD	0.0150 J	0.00760	1.00	ng/kg	103		67-158		
12378-PeCDD	0.0278 J	0.00980	5.00	ng/kg	104		70-142		
123478-HxCDD	0.0185 J	0.00990	5.00	ng/kg	106		70-164		
123678-HxCDD	0.0227 J	0.0104	5.00	ng/kg	105		76-134		
123789-HxCDD	0.0268 J	0.0101	5.00	ng/kg	105		64-162		
1234678-HpCDD	0.136 J	0.0148	5.00	ng/kg	103		70-140		
OCDD	0.342 J	0.0157	10.0	ng/kg	103		78-144		
2378-TCDF	0.0289 J	0.00680	1.00	ng/kg	114		75-158		
12378-PeCDF	0.0340 J	0.00400	5.00	ng/kg	105		80-134		
23478-PeCDF	0.0647 J	0.00410	5.00	ng/kg	104		68-160		
123478-HxCDF	0.0503 J	0.00770	5.00	ng/kg	100		72-134		
123678-HxCDF	0.0334 J	0.00620	5.00	ng/kg	99		84-130		
123789-HxCDF	0.0604 J	0.00930	5.00	ng/kg	101		78-130		
234678-HpCDF	0.0453 J	0.00720	5.00	ng/kg	101		70-156		
1234678-HpCDF	0.123 J	0.00650	5.00	ng/kg	100		82-122		
1234789-HpCDF	0.0507 J	0.0115	5.00	ng/kg	101		78-138		
OCDF	0.248 J	0.0169	10.0	ng/kg	103		63-170		

*- Outside of specification

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:39 PM

Group Number: 1225277

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
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Sample Matrix Quality Control

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

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10349162402B 28a Moisture Content by 160.3	Sample number(s): 6163903-6163904, 6163906-6163908, 6163912-6163913 BKG: P163881 8.5 8.8 4 20								
Batch number: 10364162402B 28a Moisture Content by 160.3	Sample number(s): 6163895-6163899, 6163901-6163902, 6163905, 6163909-6163911 BKG: P163871 11.4 11.7 3 20								
Batch number: 10364001	Sample number(s): 6163895-6163899, 6163901-6163913 UNSPK: 6163897								
2378-TCDD	100	101	67-158	1	25				
12378-PeCDD	102	105	70-142	2	25				
123478-HxCDD	104	107	70-164	3	25				
123678-HxCDD	105	104	76-134	0	25				
123789-HxCDD	106	104	64-162	2	25				
1234678-HpCDD	101	108	70-140	7	25				
OCDD	99	128	78-144	23	25				
2378-TCDF	111	106	75-158	4	25				
12378-PeCDF	106	106	80-134	0	25				
23478-PeCDF	104	105	68-160	1	25				
123478-HxCDF	99	101	72-134	1	25				
123678-HxCDF	101	101	84-130	0	25				
123789-HxCDF	100	100	78-130	0	25				
234678-HxCDF	100	100	70-156	0	25				
1234678-HpCDF	101	101	82-122	0	25				
1234789-HpCDF	102	101	78-138	0	25				
OCDF	104	102	63-170	2	25				

Surrogate Quality Control

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

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 10362001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6163900	3*	34	27	27	29	29
Blank	6*	70	67	66	66	69
OPR	10*	63	56	55	57	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

*- Outside of specification

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

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

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:39 PM

Group Number: 1225277

Surrogate Quality Control

6163900	29	29	28	9*	15*	24*
Blank	64	61	54	11*	32	58
OPR	55	54	48	17*	37	52
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6163900	23*	21*	30	29	33	29
Blank	54	49	63	55	57	68
OPR	50	46	56	48	51	60
Limits:	28-130	28-130	23-140	17-157	24-169	24-185
Analysis Name: 10a Dioxin/Furan by EPA 1613B						
Batch number: 10364001						
	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6163895	65	76	72	83	73	66
6163896	59	69	69	84	71	58
6163897	59	67	66	67	67	62
6163898	52	25	21*	25*	32	37
6163899	64	77	76	81	77	75
6163901	60	72	70	79	71	63
6163902	65	75	73	77	74	72
6163903	63	73	71	79	71	68
6163904	60	66	64	76	66	58
6163905	64	72	70	72	72	72
6163906	71	83	81	83	81	80
6163907	72	84	80	84	80	80
6163908	58	56	53	37	57	59
6163909	68	66	67	74	71	71
6163910	65	80	79	86	79	71
6163911	64	72	70	80	72	65
6163912	75	86	84	89	84	81
6163913	68	83	81	83	80	81
Blank	64	73	73	85	76	67
MS	52	25	21*	25*	32	37
MSD	64	77	76	81	77	75
OPR	61	72	68	80	70	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6163895	95	62	50	73	78	76
6163896	104	59	53	66	74	76
6163897	86	60	53	69	68	67
6163898	30	31	27	18*	29	24*
6163899	88	74	67	71	74	72
6163901	92	63	56	73	72	73
6163902	82	71	64	71	71	73
6163903	86	66	58	77	71	72
6163904	88	57	50	67	69	69
6163905	73	69	59	68	68	68
6163906	88	77	69	76	78	79

*- Outside of specification

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Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/01/11 at 11:39 PM

Group Number: 1225277

Surrogate Quality Control

6163907	92	78	68	79	80	80
6163908	62	54	45	56	58	56
6163909	88	71	64	64	70	67
6163910	98	72	63	76	79	80
6163911	93	64	56	71	74	75
6163912	91	81	73	81	81	82
6163913	84	78	71	77	77	78
Blank	99	65	57	75	77	81
MS	30	31	27	18*	29	24*
MSD	88	74	67	71	74	72
OPR	93	62	53	71	75	76
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6163895	73	75	75	67	68	84
6163896	77	76	78	71	59	82
6163897	66	68	68	62	63	68
6163898	25*	37	34	34	30	34
6163899	73	74	75	70	69	81
6163901	71	71	73	66	64	80
6163902	71	71	72	66	70	78
6163903	70	71	70	66	67	80
6163904	70	70	70	65	61	77
6163905	67	68	66	59	70	75
6163906	76	77	77	70	77	84
6163907	79	79	80	74	78	86
6163908	55	60	57	52	59	51
6163909	69	75	74	70	72	84
6163910	80	79	82	72	70	86
6163911	73	74	76	68	65	81
6163912	82	81	81	75	80	87
6163913	78	76	77	69	77	83
Blank	79	78	77	69	64	80
MS	25*	37	34	34	30	34
MSD	73	74	75	70	69	81
OPR	75	75	74	65	59	78
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

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

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

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

13013 1225277 6163895-913

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						CHAIN OF CUSTODY RECORD															Other Instructions and Notes									
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOC/EPA 8160B	1,4-Dioxane EPA 8160B/AM	SVOCs EPA 8210C & PAHs EPA 8210/SM	TPH/GRO EPA 8015B	TPH-EPI EPA 8015B Mod.	Metals EPA 8210/6020&7471A	*Hex Chrome EPA 7159*	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1631B	*Pesticides EPA 314.0	Pesticides Confirmation by EPA 6250	*Pesticides EPA 8081A (surface soil only)	*Nitrates EPA 8151 (surface soil only)	*Nitrites EPA 300.0		*Formaldehyde EPA 8131A	*HDMAs EPA 8125C	*Emergent EPA 8130A	*Cyanides EPA 9012B	*Jars EPA 9045C	*Terphenyls EPA 8015B	*Glyphs EPA 3015B	*Alcohols EPA 8015B	
SL-006-SASC-SB-9.0-10.0	12.13.10	0955	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	
DUP13-SASC-QC-121310	12.13.10	1010	soil	none	3 x 4 oz. Jars & 3 x 16 oz. Jars			X			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	dup
SL-006-SASC-SB-4.0-5.0MS	12.13.10	0945	soil	none	8 x 16 oz. Jars			X			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	MS sample
SL-006-SASC-SB-4.0-5.0MS	12.13.10	0945	soil	none	4 x 16 oz. Jars			X			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	MS sample
EB-15-SASB-121310	12.13.10	1215	water	none	6-1 liter amber			X						X	X			X	X											rinsate
EB-15-SASB-121310	12.13.10	1215	water	none	1-500 ml poly								X	X		X														rinsate
EB-15-SASB-121310	12.13.10	1215	water	HNO3	1-500 ml poly						X																			rinsate
EB-15-SASB-121310	12.13.10	1215	water	HCl	6-40 ml amber VOA vials	X	X																							rinsate
SL-006-SASC-SB-4.5MS	12.13.10	0943	soil	none	15 Encore Samplers	X	X	X																						MS sample
SL-006-SASC-SB-9.5	12.13.10	0953	soil	none	5 Encore Samplers	X	X	X																						
DUP13-SASC-QC-121310	12.13.10	1010	soil	none	5 Encore Samplers	X	X	X																						dup
SL-007-SASC-SB-9.5	12.13.10	1210	soil	none	5 Encore Samplers	X	X	X																						
SL-007-SASC-SB-4.0-5.0	12.13.10	1214	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	
SL-007-SASC-SB-9.0-10.0	12.13.10	1214	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	
SL-075-SASB-SS-0.0-0.5	12.13.10	0903	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-007-SASB-SS-4.5	12.13.10	1200	soil	none	5 Encore Samplers	X	X	X			X	X	X	X	X	X	X	X												
SL-078-SASB-SS-0.0-0.5	12.13.10	1110	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-084-SASB-SS-0.0-0.5	12.13.10	1046	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-076-SASB-SS-0.0-0.5	12.13.10	0928	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-071-SASB-SS-0.0-0.5MS	12.13.10	1009	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X	X	X												MS sample
SL-139-SASB-SS-0.0-0.5	12.13.10	1104	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-085-SASB-SS-0.0-0.5	12.13.10	1049	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-074-SASB-SS-0.0-0.5	12.13.10	0915	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-301-SASB-SS-0.0-0.5	12.13.10	0900	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-079-SASB-SS-0.0-0.5	12.13.10	0930	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-072-SASB-SS-0.0-0.5	12.13.10	0948	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
DUP04-SASB-QC-121310	12.13.10	1015	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												dup
SED-029-SIV-SD-0.0-0.5	12.13.10	1152	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SED-031-SIV-SD-0.0-0.5	12.13.10	0920	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SED-030-SIV-SD-0.0-0.5	12.13.10	1113	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SED-040-SIV-SD-0.0-0.5	12.13.10	1019	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-086-SASB-SS-0.0-0.5	12.13.10	1345	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-092-SASB-SS-0.0-0.5	12.13.10	1327	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-103-SASB-SS-0.0-0.5	12.13.10	1425	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-089-SASB-SS-0.0-0.5	12.13.10	1410	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-236-SASB-SS-0.0-0.5	12.13.10	1310	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-085-SASB-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-085-SASB-SS-0.0-0.5	12.13.10	1335	soil	none	5 Encore Samplers	X	X	X																						
SL-085-SASB-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar																X	X	X	X	X	X	X	X	X	
SL-087-SASB-SS-0.0-0.5	12.13.10	1317	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-095-SASB-SS-0.0-0.5	12.13.10	1440	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-091-SASB-SS-0.0-0.5	12.13.10	1510	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SL-003-SASC-SB-4.0-5.0	12.13.10	1437	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	
SL-003-SASC-SB-4.5	12.13.10	1433	soil	none	5 Encore Samplers	X	X	X																						
SL-001-SASC-SB-4.0-5.0	12.13.10	1608	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	
SL-001-SASC-SB-9.0-10.0	12.13.10	1616	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	
SL-001-SASC-SB-4.5	12.13.10	1604	soil	none	5 Encore Samplers	X	X	X																						
SL-001-SASC-SB-9.5	12.13.10	1612	soil	none	5 Encore Samplers	X	X	X																						
SED-032-SIV-SD-0.0-0.5	12.13.10	1457	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												
SED-033-SIV-SD-0.0-0.5	12.13.10	1540	soil	none	1 x 16 oz. jar & 16" sleeve			X			X	X	X	X	X	X	X	X												

SL-077-SASB-SS-00-0.5
Per AMC
on 12/17/10
NLM
12/30/10

Laboratory:
Lancaster Laboratories, Inc.
6 copiers

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

February 02, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/15/2010

Group Number: 1225550

SDG: DX023

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-002-SA5C-SB-4.0-5.0 Soil	6164970
SL-002-SA5C-SB-9.0-10.0 Soil	6164971
EB02-SA5B-121410 Water	6164972
SL-004-SA5C-SB-9.0-10.0 Soil	6164973
SL-004-SA5C-SB-4.0-5.0 Soil	6164974
SL-140-SA5C-SB-3.0-4.0 Soil	6164975
SED-024-SIV-SD-0.0-0.5 Sediment	6164976
SED-023-SIV-SD-0.0-0.5 Sediment	6164977
SED-022-SIV-SD-0.0-0.5 Sediment	6164978
SL-125-SA5B-SS-0.0-0.5 Soil	6164979
SL-126-SA5B-SS-0.0-0.5 Soil	6164980
SL-129-SA5B-SS-0.0-0.5 Soil	6164981
SL-128-SA5B-SS-0.0-0.5 Soil	6164982
SED-027-SIV-SD-0.0-0.5 Sediment	6164983
SED-026-SIV-SD-0.0-0.5 Sediment	6164984
SL-060-SA5C-SB-10.0-11.0 Soil	6164985

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

ELECTRONIC COPY TO
1 COPY TO

CDM Federal Services Program
Data Package Group

Attn: Todd Burgess

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

Respectfully Submitted,



Charles J. Neslund
Manager



Analysis Report

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Page 1 of 4

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2301 SDG#: DX023-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1

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

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2301 SDG#: DX023-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0226 JBQ	0.0184	1.07	1
11031	12378-PeCDD	40321-76-4	0.0805 JBQ	0.0271	5.33	1
11031	123478-HxCDD	39227-28-6	0.0232 U	0.0232	5.33	1
11031	123678-HxCDD	57653-85-7	0.124 JB	0.0242	5.33	1
11031	123789-HxCDD	19408-74-3	0.141 JB	0.0244	5.33	1
11031	1234678-HpCDD	35822-46-9	0.233 JBQ	0.0322	5.33	1
11031	OCDD	3268-87-9	0.786 JB	0.0433	10.7	1
11031	2378-TCDF	51207-31-9	0.0199 JBQ	0.0167	1.07	1
11031	12378-PeCDF	57117-41-6	0.0462 JBQ	0.0107	5.33	1
11031	23478-PeCDF	57117-31-4	0.0561 JB	0.0106	5.33	1
11031	123478-HxCDF	70648-26-9	0.0426 JB	0.0155	5.33	1
11031	123678-HxCDF	57117-44-9	0.0577 JBQ	0.0143	5.33	1
11031	123789-HxCDF	72918-21-9	0.0878 JBQ	0.0186	5.33	1
11031	234678-HxCDF	60851-34-5	0.0787 JB	0.0148	5.33	1
11031	1234678-HpCDF	67562-39-4	0.172 JB	0.0154	5.33	1
11031	1234789-HpCDF	55673-89-7	0.0860 JBQ	0.0220	5.33	1
11031	OCDF	39001-02-0	0.207 JB	0.0350	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2301 SDG#: DX023-01

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

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2301 SDG#: DX023-01

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 17:06	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2302 SDG#: DX023-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.7	0.50	0.50	1

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

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2302 SDG#: DX023-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0168 U	0.0168	1.20	1
11031	12378-PeCDD	40321-76-4	0.0240 U	0.0240	6.00	1
11031	123478-HxCDD	39227-28-6	0.0267 JBQ	0.0196	6.00	1
11031	123678-HxCDD	57653-85-7	0.0815 JB	0.0198	6.00	1
11031	123789-HxCDD	19408-74-3	0.139 JB	0.0190	6.00	1
11031	1234678-HpCDD	35822-46-9	0.277 JBQ	0.0257	6.00	1
11031	OCDD	3268-87-9	1.30 JB	0.0373	12.0	1
11031	2378-TCDF	51207-31-9	0.0192 JBQ	0.0154	1.20	1
11031	12378-PeCDF	57117-41-6	0.0438 JBQ	0.00852	6.00	1
11031	23478-PeCDF	57117-31-4	0.0560 JB	0.00912	6.00	1
11031	123478-HxCDF	70648-26-9	0.0487 JB	0.0150	6.00	1
11031	123678-HxCDF	57117-44-9	0.0378 JB	0.0122	6.00	1
11031	123789-HxCDF	72918-21-9	0.160 JB	0.0168	6.00	1
11031	234678-HxCDF	60851-34-5	0.0442 JB	0.0139	6.00	1
11031	1234678-HpCDF	67562-39-4	0.119 JB	0.00996	6.00	1
11031	1234789-HpCDF	55673-89-7	0.0608 JB	0.0174	6.00	1
11031	OCDF	39001-02-0	0.169 JBQ	0.0365	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

CDM Federal Programs Corp.

Submitted: 12/15/2010 09:40

14420 Albemarle Point Place

Reported: 02/02/2011 17:39

Suite 210

Chantilly VA 20151

X2302 SDG#: DX023-02

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

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2302 SDG#: DX023-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 18:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164972
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2303 SDG#: DX023-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.919 U	0.919	1.96	1
10915	12378-PeCDD	40321-76-4	0.535 U	0.535	9.82	1
10915	123478-HxCDD	39227-28-6	0.317 JBQ	0.224	9.82	1
10915	123678-HxCDD	57653-85-7	0.228 U	0.228	9.82	1
10915	123789-HxCDD	19408-74-3	0.238 U	0.238	9.82	1
10915	1234678-HpCDD	35822-46-9	1.24 JBQ	0.302	9.82	1
10915	OCDD	3268-87-9	3.54 JBQ	0.345	19.6	1
10915	2378-TCDF	51207-31-9	0.256 U	0.256	1.96	1
10915	12378-PeCDF	57117-41-6	0.387 JBQ	0.193	9.82	1
10915	23478-PeCDF	57117-31-4	0.707 JBQ	0.164	9.82	1
10915	123478-HxCDF	70648-26-9	0.429 JBQ	0.171	9.82	1
10915	123678-HxCDF	57117-44-9	0.244 JBQ	0.169	9.82	1
10915	123789-HxCDF	72918-21-9	0.633 JBQ	0.175	9.82	1
10915	234678-HxCDF	60851-34-5	0.432 JBQ	0.163	9.82	1
10915	1234678-HpCDF	67562-39-4	1.40 JBQ	0.118	9.82	1
10915	1234789-HpCDF	55673-89-7	0.257 JBQ	0.141	9.82	1
10915	OCDF	39001-02-0	1.35 JBQ	0.309	19.6	1

The recoveries of several labeled compounds were outside QC limits in this sample and the blank and OPR associated with this sample. The sample was re-extracted outside the project specified holding time with all labeled compound recoveries within QC specification. Comparable native compound results were observed between the two extractions.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	11	25 - 164
13C12-12378-PeCDD	28	25 - 181
13C12-123478-HxCDD	36	32 - 141
13C12-123678-HxCDD	34	28 - 130
13C12-123789-HxCDD	33	28 - 130
13C12-1234678-HpCDD	39	23 - 140
13C12-OCDD	38	17 - 157
13C12-2378-TCDF	38	24 - 169
13C12-12378-PeCDF	39	24 - 185
13C12-23478-PeCDF	43	21 - 178
13C12-123478-HxCDF	37	26 - 152
13C12-123678-HxCDF	36	26 - 123
13C12-234678-HxCDF	38	28 - 136
13C12-123789-HxCDF	41	29 - 147
13C12-1234678-HpCDF	39	28 - 143
13C12-1234789-HpCDF	38	26 - 138
13C12-OCDF	37	17 - 157
13C12-1278-TCDD (CRS)	22	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

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

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164972
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2303 SDG#: DX023-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
E	Exceeds calibration range					
C	Confirmed quantitation on secondary GC column					
Q	EMPC - Estimated Maximum Possible Concentration					
F	Interference is present					
S	Saturation of detection signal					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	10362001	12/30/2010 18:22	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	10362001	12/28/2010 06:30	Ginelle L Haines	1



Analysis Report

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Page 1 of 4

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2304 SDG#: DX023-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.8	0.50	0.50	1

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

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2304 SDG#: DX023-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0213 U	0.0213	1.20	1
11031	12378-PeCDD	40321-76-4	0.0388 JBQ	0.0296	6.01	1
11031	123478-HxCDD	39227-28-6	0.0292 JBQ	0.0202	6.01	1
11031	123678-HxCDD	57653-85-7	0.105 JBQ	0.0206	6.01	1
11031	123789-HxCDD	19408-74-3	0.179 JBQ	0.0210	6.01	1
11031	1234678-HpCDD	35822-46-9	0.407 JB	0.0300	6.01	1
11031	OCDD	3268-87-9	2.29 JB	0.0376	12.0	1
11031	2378-TCDF	51207-31-9	0.0294 JB	0.0213	1.20	1
11031	12378-PeCDF	57117-41-6	0.0580 JBQ	0.0105	6.01	1
11031	23478-PeCDF	57117-31-4	0.0956 JBQ	0.0114	6.01	1
11031	123478-HxCDF	70648-26-9	0.0588 JBQ	0.0160	6.01	1
11031	123678-HxCDF	57117-44-9	0.0610 JBQ	0.0133	6.01	1
11031	123789-HxCDF	72918-21-9	0.176 JB	0.0212	6.01	1
11031	234678-HxCDF	60851-34-5	0.107 JBQ	0.0154	6.01	1
11031	1234678-HpCDF	67562-39-4	0.234 JBQ	0.0117	6.01	1
11031	1234789-HpCDF	55673-89-7	0.0830 JBQ	0.0218	6.01	1
11031	OCDF	39001-02-0	0.329 JB	0.0425	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2304 SDG#: DX023-04

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

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2304 SDG#: DX023-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 19:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2305 SDG#: DX023-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.2	0.50	0.50	1

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

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2305 SDG#: DX023-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0194 JBQ	0.0172	1.19	1
11031	12378-PeCDD	40321-76-4	0.0257 U	0.0257	5.97	1
11031	123478-HxCDD	39227-28-6	0.0166 JBQ	0.0136	5.97	1
11031	123678-HxCDD	57653-85-7	0.0419 JBQ	0.0140	5.97	1
11031	123789-HxCDD	19408-74-3	0.0354 JBQ	0.0136	5.97	1
11031	1234678-HpCDD	35822-46-9	0.176 JBQ	0.0248	5.97	1
11031	OCDD	3268-87-9	0.629 JBQ	0.0368	11.9	1
11031	2378-TCDF	51207-31-9	0.0142 U	0.0142	1.19	1
11031	12378-PeCDF	57117-41-6	0.00859 U	0.00859	5.97	1
11031	23478-PeCDF	57117-31-4	0.0602 JB	0.00895	5.97	1
11031	123478-HxCDF	70648-26-9	0.0414 JB	0.0113	5.97	1
11031	123678-HxCDF	57117-44-9	0.0260 JBQ	0.00943	5.97	1
11031	123789-HxCDF	72918-21-9	0.0640 JBQ	0.0138	5.97	1
11031	234678-HxCDF	60851-34-5	0.0394 JBQ	0.0107	5.97	1
11031	1234678-HpCDF	67562-39-4	0.104 JBQ	0.00979	5.97	1
11031	1234789-HpCDF	55673-89-7	0.0625 JB	0.0169	5.97	1
11031	OCDF	39001-02-0	0.148 JBQ	0.0298	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	52	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2305 SDG#: DX023-05

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

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2305 SDG#: DX023-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 19:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2306 SDG#: DX023-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10.1	0.50	0.50	1

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

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2306 SDG#: DX023-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0257 U	0.0257	1.11	1
11031	12378-PeCDD	40321-76-4	0.0347 U	0.0347	5.56	1
11031	123478-HxCDD	39227-28-6	0.0187 U	0.0187	5.56	1
11031	123678-HxCDD	57653-85-7	0.0195 U	0.0195	5.56	1
11031	123789-HxCDD	19408-74-3	0.0405 JBQ	0.0201	5.56	1
11031	1234678-HpCDD	35822-46-9	0.117 JB	0.0288	5.56	1
11031	OCDD	3268-87-9	0.507 JBQ	0.0492	11.1	1
11031	2378-TCDF	51207-31-9	0.0185 U	0.0185	1.11	1
11031	12378-PeCDF	57117-41-6	0.0234 JBQ	0.0120	5.56	1
11031	23478-PeCDF	57117-31-4	0.0581 JBQ	0.0125	5.56	1
11031	123478-HxCDF	70648-26-9	0.0325 JBQ	0.0155	5.56	1
11031	123678-HxCDF	57117-44-9	0.0200 JBQ	0.0131	5.56	1
11031	123789-HxCDF	72918-21-9	0.0537 JB	0.0210	5.56	1
11031	234678-HxCDF	60851-34-5	0.0404 JBQ	0.0147	5.56	1
11031	1234678-HpCDF	67562-39-4	0.108 JB	0.0140	5.56	1
11031	1234789-HpCDF	55673-89-7	0.0727 JB	0.0253	5.56	1
11031	OCDF	39001-02-0	0.189 JBQ	0.0436	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	63	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	65	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	43	17 - 157
13C12-1278-TCDD (CRS)	64	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2306 SDG#: DX023-06

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

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2306 SDG#: DX023-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 20:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2307 SDG#: DX023-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.8	0.50	0.50	1

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

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2307 SDG#: DX023-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0556 JB	0.0249	1.15	1
11031	12378-PeCDD	40321-76-4	0.333 JBQ	0.0529	5.73	1
11031	123478-HxCDD	39227-28-6	0.159 JB	0.0253	5.73	1
11031	123678-HxCDD	57653-85-7	0.441 JB	0.0267	5.73	1
11031	123789-HxCDD	19408-74-3	0.430 JB	0.0267	5.73	1
11031	1234678-HpCDD	35822-46-9	5.00 JB	0.0328	5.73	1
11031	OCDD	3268-87-9	32.0 B	0.0354	11.5	1
11031	2378-TCDF	51207-31-9	0.324 JB	0.0493	1.15	1
11031	12378-PeCDF	57117-41-6	0.275 JB	0.0205	5.73	1
11031	23478-PeCDF	57117-31-4	0.583 JB	0.0243	5.73	1
11031	123478-HxCDF	70648-26-9	0.219 JB	0.0170	5.73	1
11031	123678-HxCDF	57117-44-9	0.232 JB	0.0143	5.73	1
11031	123789-HxCDF	72918-21-9	0.0859 JBQ	0.0208	5.73	1
11031	234678-HxCDF	60851-34-5	0.253 JB	0.0158	5.73	1
11031	1234678-HpCDF	67562-39-4	1.22 JB	0.0167	5.73	1
11031	1234789-HpCDF	55673-89-7	0.119 JB	0.0294	5.73	1
11031	OCDF	39001-02-0	2.24 JB	0.0292	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	43	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2307 SDG#: DX023-07

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

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2307 SDG#: DX023-07

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 21:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2308 SDG#: DX023-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10.8	0.50	0.50	1

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

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2308 SDG#: DX023-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.133 JBQ	0.0315	1.12	1
11031	12378-PeCDD	40321-76-4	0.310 JB	0.0496	5.61	1
11031	123478-HxCDD	39227-28-6	0.223 JB	0.0243	5.61	1
11031	123678-HxCDD	57653-85-7	0.421 JB	0.0252	5.61	1
11031	123789-HxCDD	19408-74-3	0.391 JB	0.0233	5.61	1
11031	1234678-HpCDD	35822-46-9	5.10 JB	0.0324	5.61	1
11031	OCDD	3268-87-9	29.8 B	0.0323	11.2	1
11031	2378-TCDF	51207-31-9	0.366 JBQ	0.0478	1.12	1
11031	12378-PeCDF	57117-41-6	0.307 JBQ	0.0185	5.61	1
11031	23478-PeCDF	57117-31-4	0.570 JB	0.0187	5.61	1
11031	123478-HxCDF	70648-26-9	0.260 JB	0.0177	5.61	1
11031	123678-HxCDF	57117-44-9	0.215 JB	0.0149	5.61	1
11031	123789-HxCDF	72918-21-9	0.117 JB	0.0192	5.61	1
11031	234678-HxCDF	60851-34-5	0.238 JB	0.0169	5.61	1
11031	1234678-HpCDF	67562-39-4	0.994 JB	0.0165	5.61	1
11031	1234789-HpCDF	55673-89-7	0.132 JBQ	0.0270	5.61	1
11031	OCDF	39001-02-0	1.53 JB	0.0288	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2308 SDG#: DX023-08

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

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2308 SDG#: DX023-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 22:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2309 SDG#: DX023-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	7.6	0.50	0.50	1

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

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2309 SDG#: DX023-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.184	JB 0.0335	1.08	1
11031	12378-PeCDD	40321-76-4	0.532	JB 0.0801	5.41	1
11031	123478-HxCDD	39227-28-6	0.986	JB 0.0528	5.41	1
11031	123678-HxCDD	57653-85-7	5.60	B 0.0543	5.41	1
11031	123789-HxCDD	19408-74-3	1.93	JB 0.0527	5.41	1
11031	1234678-HpCDD	35822-46-9	136	B 0.172	5.41	1
11031	OCDD	3268-87-9	1,310	B 0.113	10.8	1
11031	2378-TCDF	51207-31-9	0.473	JB 0.0584	1.08	1
11031	12378-PeCDF	57117-41-6	0.657	JB 0.0258	5.41	1
11031	23478-PeCDF	57117-31-4	0.792	JB 0.0267	5.41	1
11031	123478-HxCDF	70648-26-9	0.858	JB 0.0446	5.41	1
11031	123678-HxCDF	57117-44-9	1.06	JB 0.0385	5.41	1
11031	123789-HxCDF	72918-21-9	0.176	JB 0.0553	5.41	1
11031	234678-HxCDF	60851-34-5	1.35	JB 0.0424	5.41	1
11031	1234678-HpCDF	67562-39-4	29.1	B 0.0382	5.41	1
11031	1234789-HpCDF	55673-89-7	2.68	JB 0.0724	5.41	1
11031	OCDF	39001-02-0	80.4	B 0.0560	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	45	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2309 SDG#: DX023-09

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

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2309 SDG#: DX023-09

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 23:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2310 SDG#: DX023-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.3	0.50	0.50	1

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

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2310 SDG#: DX023-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.135	JBQ 0.0262	1.06	1
11031	12378-PeCDD	40321-76-4	0.843	JB 0.0570	5.28	1
11031	123478-HxCDD	39227-28-6	1.57	JB 0.0528	5.28	1
11031	123678-HxCDD	57653-85-7	3.86	JB 0.0551	5.28	1
11031	123789-HxCDD	19408-74-3	3.20	JB 0.0520	5.28	1
11031	1234678-HpCDD	35822-46-9	116	B 0.134	5.28	1
11031	OCDD	3268-87-9	1,280	B 0.0855	10.6	1
11031	2378-TCDF	51207-31-9	0.276	JBQ 0.0508	1.06	1
11031	12378-PeCDF	57117-41-6	0.659	JB 0.0226	5.28	1
11031	23478-PeCDF	57117-31-4	0.641	JB 0.0235	5.28	1
11031	123478-HxCDF	70648-26-9	0.887	JB 0.0445	5.28	1
11031	123678-HxCDF	57117-44-9	2.54	JB 0.0367	5.28	1
11031	123789-HxCDF	72918-21-9	0.718	JBQ 0.0526	5.28	1
11031	234678-HxCDF	60851-34-5	1.22	JB 0.0422	5.28	1
11031	1234678-HpCDF	67562-39-4	22.0	B 0.0313	5.28	1
11031	1234789-HpCDF	55673-89-7	1.91	JB 0.0560	5.28	1
11031	OCDF	39001-02-0	63.9	B 0.0620	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2310 SDG#: DX023-10

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

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2310 SDG#: DX023-10

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 03:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2311 SDG#: DX023-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	4.7	0.50	0.50	1

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

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2311 SDG#: DX023-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.126	JB 0.0193	1.05	1
11031	12378-PeCDD	40321-76-4	0.942	JB 0.0524	5.25	1
11031	123478-HxCDD	39227-28-6	1.87	JB 0.0440	5.25	1
11031	123678-HxCDD	57653-85-7	5.41	B 0.0454	5.25	1
11031	123789-HxCDD	19408-74-3	3.99	JB 0.0459	5.25	1
11031	1234678-HpCDD	35822-46-9	174	B 0.142	5.25	1
11031	OCDD	3268-87-9	1,800	B 0.102	10.5	1
11031	2378-TCDF	51207-31-9	0.318	JB 0.0446	1.05	1
11031	12378-PeCDF	57117-41-6	0.765	JB 0.0192	5.25	1
11031	23478-PeCDF	57117-31-4	0.742	JB 0.0194	5.25	1
11031	123478-HxCDF	70648-26-9	1.23	JB 0.0328	5.25	1
11031	123678-HxCDF	57117-44-9	1.75	JB 0.0297	5.25	1
11031	123789-HxCDF	72918-21-9	0.685	JB 0.0385	5.25	1
11031	234678-HxCDF	60851-34-5	1.23	JB 0.0317	5.25	1
11031	1234678-HpCDF	67562-39-4	33.0	B 0.0398	5.25	1
11031	1234789-HpCDF	55673-89-7	2.06	JB 0.0546	5.25	1
11031	OCDF	39001-02-0	103	B 0.0385	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2311 SDG#: DX023-11

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

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2311 SDG#: DX023-11

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 04:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2312 SDG#: DX023-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.3	0.50	0.50	1

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

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2312 SDG#: DX023-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.166 JBQ	0.0211	1.06	1
11031	12378-PeCDD	40321-76-4	1.94 JB	0.0523	5.28	1
11031	123478-HxCDD	39227-28-6	4.08 JB	0.0561	5.28	1
11031	123678-HxCDD	57653-85-7	23.9 B	0.0584	5.28	1
11031	123789-HxCDD	19408-74-3	8.22 B	0.0581	5.28	1
11031	1234678-HpCDD	35822-46-9	949 B	0.271	5.28	1
11031	OCDD	3268-87-9	11,200 EB	0.143	10.6	1
11031	2378-TCDF	51207-31-9	0.330 JB	0.0439	1.06	1
11031	12378-PeCDF	57117-41-6	0.687 JB	0.0197	5.28	1
11031	23478-PeCDF	57117-31-4	0.839 JB	0.0202	5.28	1
11031	123478-HxCDF	70648-26-9	3.48 JB	0.0545	5.28	1
11031	123678-HxCDF	57117-44-9	3.48 JB	0.0468	5.28	1
11031	123789-HxCDF	72918-21-9	1.15 JB	0.0626	5.28	1
11031	234678-HxCDF	60851-34-5	3.93 JB	0.0504	5.28	1
11031	1234678-HpCDF	67562-39-4	195 B	0.0627	5.28	1
11031	1234789-HpCDF	55673-89-7	9.95 B	0.0994	5.28	1
11031	OCDF	39001-02-0	773 B	0.0673	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	78	28 - 136

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

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2312 SDG#: DX023-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-123789-HxCDF	75	29 - 147			
	13C12-1234678-HpCDF	91	28 - 143			
	13C12-1234789-HpCDF	69	26 - 138			
	13C12-OCDF	60	17 - 157			
	13C12-1278-TCDD (CRS)	78	35 - 197			

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2312 SDG#: DX023-12

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 05:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2313 SDG#: DX023-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	5.7	0.50	0.50	1

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

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2313 SDG#: DX023-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0810 JBQ	0.0186	1.06	1
11031	12378-PeCDD	40321-76-4	0.614 JB	0.0358	5.30	1
11031	123478-HxCDD	39227-28-6	1.09 JB	0.0284	5.30	1
11031	123678-HxCDD	57653-85-7	3.18 JB	0.0292	5.30	1
11031	123789-HxCDD	19408-74-3	2.57 JB	0.0290	5.30	1
11031	1234678-HpCDD	35822-46-9	89.1 B	0.0712	5.30	1
11031	OCDD	3268-87-9	920 B	0.0639	10.6	1
11031	2378-TCDF	51207-31-9	0.293 JB	0.0385	1.06	1
11031	12378-PeCDF	57117-41-6	0.463 JB	0.0160	5.30	1
11031	23478-PeCDF	57117-31-4	0.679 JB	0.0173	5.30	1
11031	123478-HxCDF	70648-26-9	0.674 JB	0.0279	5.30	1
11031	123678-HxCDF	57117-44-9	0.746 JB	0.0234	5.30	1
11031	123789-HxCDF	72918-21-9	0.640 JB	0.0351	5.30	1
11031	234678-HxCDF	60851-34-5	0.796 JB	0.0262	5.30	1
11031	1234678-HpCDF	67562-39-4	13.8 B	0.0232	5.30	1
11031	1234789-HpCDF	55673-89-7	1.01 JB	0.0405	5.30	1
11031	OCDF	39001-02-0	39.3 B	0.0291	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	100	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

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



Analysis Report

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Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2313 SDG#: DX023-13

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

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



Analysis Report

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

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Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2313 SDG#: DX023-13

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 06:31	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

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



Analysis Report

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Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2314 SDG#: DX023-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.6	0.50	0.50	1

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

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2314 SDG#: DX023-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.141 JB	0.0358	1.16	1
11031	12378-PeCDD	40321-76-4	0.162 JBQ	0.0573	5.79	1
11031	123478-HxCDD	39227-28-6	0.220 JB	0.0481	5.79	1
11031	123678-HxCDD	57653-85-7	0.721 JB	0.0502	5.79	1
11031	123789-HxCDD	19408-74-3	0.471 JB	0.0476	5.79	1
11031	1234678-HpCDD	35822-46-9	11.3 B	0.0719	5.79	1
11031	OCDD	3268-87-9	148 B	0.0705	11.6	1
11031	2378-TCDF	51207-31-9	0.384 JBQ	0.0671	1.16	1
11031	12378-PeCDF	57117-41-6	0.588 JB	0.0301	5.79	1
11031	23478-PeCDF	57117-31-4	0.736 JB	0.0313	5.79	1
11031	123478-HxCDF	70648-26-9	0.418 JB	0.0505	5.79	1
11031	123678-HxCDF	57117-44-9	0.387 JB	0.0427	5.79	1
11031	123789-HxCDF	72918-21-9	0.375 JB	0.0602	5.79	1
11031	234678-HxCDF	60851-34-5	0.353 JB	0.0473	5.79	1
11031	1234678-HpCDF	67562-39-4	3.24 JB	0.0363	5.79	1
11031	1234789-HpCDF	55673-89-7	0.489 JB	0.0666	5.79	1
11031	OCDF	39001-02-0	8.78 JB	0.0550	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	48	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2314 SDG#: DX023-14

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

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2314 SDG#: DX023-14

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 07:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2315 SDG#: DX023-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.8	0.50	0.50	1

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

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2315 SDG#: DX023-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0512	JBQ 0.0133	1.16	1
11031	12378-PeCDD	40321-76-4	0.376	JBQ 0.0331	5.80	1
11031	123478-HxCDD	39227-28-6	0.684	JB 0.0223	5.80	1
11031	123678-HxCDD	57653-85-7	4.59	JB 0.0227	5.80	1
11031	123789-HxCDD	19408-74-3	1.60	JB 0.0213	5.80	1
11031	1234678-HpCDD	35822-46-9	76.7	B 0.0729	5.80	1
11031	OCDD	3268-87-9	1,490	B 0.0773	11.6	1
11031	2378-TCDF	51207-31-9	0.426	JB 0.0383	1.16	1
11031	12378-PeCDF	57117-41-6	1.91	JB 0.0142	5.80	1
11031	23478-PeCDF	57117-31-4	0.871	JB 0.0147	5.80	1
11031	123478-HxCDF	70648-26-9	0.673	JB 0.0182	5.80	1
11031	123678-HxCDF	57117-44-9	0.673	JB 0.0151	5.80	1
11031	123789-HxCDF	72918-21-9	0.377	JB 0.0202	5.80	1
11031	234678-HxCDF	60851-34-5	0.683	JB 0.0173	5.80	1
11031	1234678-HpCDF	67562-39-4	13.4	B 0.0194	5.80	1
11031	1234789-HpCDF	55673-89-7	0.727	JB 0.0302	5.80	1
11031	OCDF	39001-02-0	50.3	B 0.0202	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	67	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2315 SDG#: DX023-15

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

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2315 SDG#: DX023-15

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/17/2011 22:22	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1



Analysis Report

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Page 1 of 4

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2316 SDG#: DX023-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.9	0.50	0.50	1

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

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2316 SDG#: DX023-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0302 JB	0.0161	1.15	1
11031	12378-PeCDD	40321-76-4	0.0657 JBQ	0.0230	5.74	1
11031	123478-HxCDD	39227-28-6	0.0317 JBQ	0.0181	5.74	1
11031	123678-HxCDD	57653-85-7	0.124 JB	0.0186	5.74	1
11031	123789-HxCDD	19408-74-3	0.155 JBQ	0.0188	5.74	1
11031	1234678-HpCDD	35822-46-9	1.38 JB	0.0257	5.74	1
11031	OCDD	3268-87-9	19.0 B	0.0307	11.5	1
11031	2378-TCDF	51207-31-9	0.0138 U	0.0138	1.15	1
11031	12378-PeCDF	57117-41-6	0.0816 JB	0.00907	5.74	1
11031	23478-PeCDF	57117-31-4	0.114 JBQ	0.00987	5.74	1
11031	123478-HxCDF	70648-26-9	0.0766 JBQ	0.0172	5.74	1
11031	123678-HxCDF	57117-44-9	0.0531 JB	0.0145	5.74	1
11031	123789-HxCDF	72918-21-9	0.132 JBQ	0.0202	5.74	1
11031	234678-HxCDF	60851-34-5	0.0566 JB	0.0161	5.74	1
11031	1234678-HpCDF	67562-39-4	0.304 JBQ	0.0156	5.74	1
11031	1234789-HpCDF	55673-89-7	0.0571 JBQ	0.0281	5.74	1
11031	OCDF	39001-02-0	0.536 JBQ	0.0269	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

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

Submitted: 12/15/2010 09:40

Reported: 02/02/2011 17:39

X2316 SDG#: DX023-16

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

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/15/2010 09:40

Suite 210

Reported: 02/02/2011 17:39

Chantilly VA 20151

X2316 SDG#: DX023-16

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 09:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11005162401A	01/05/2011 18:13	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 05:39 PM

Group Number: 1225550

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10350162401A 28a Moisture Content by 160.3	Sample number(s): 6164976-6164984				100		80-120		
Batch number: 10364162402A 28a Moisture Content by 160.3	Sample number(s): 6164971,6164973-6164975				100		80-120		
Batch number: 10364162402B 28a Moisture Content by 160.3	Sample number(s): 6164970				100		80-120		
Batch number: 11005162401A 28a Moisture Content by 160.3	Sample number(s): 6164985				100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 10362001	Sample number(s): 6164972								
2378-TCDD	2.81	1.76	2.00	pg/l	89		67-158		
12378-PeCDD	0.684 J	0.492	10.0	pg/l	96		70-142		
123478-HxCDD	0.485 J	0.235	10.0	pg/l	106		70-164		
123678-HxCDD	0.512 J	0.243	10.0	pg/l	104		76-134		
123789-HxCDD	0.483 J	0.269	10.0	pg/l	106		64-162		
1234678-HpCDD	1.35 J	0.246	10.0	pg/l	108		70-140		
OCDD	2.39 J	0.274	20.0	pg/l	118		78-144		
2378-TCDF	0.181 J	0.166	2.00	pg/l	95		75-158		
12378-PeCDF	0.474 J	0.125	10.0	pg/l	104		80-134		
23478-PeCDF	0.810 J	0.113	10.0	pg/l	102		68-160		
123478-HxCDF	0.599 J	0.136	10.0	pg/l	111		72-134		
123678-HxCDF	0.568 J	0.132	10.0	pg/l	113		84-130		
123789-HxCDF	0.637 J	0.143	10.0	pg/l	111		78-130		
234678-HxCDF	0.505 J	0.136	10.0	pg/l	109		70-156		
1234678-HpCDF	1.41 J	0.122	10.0	pg/l	116		82-122		
1234789-HpCDF	0.582 J	0.148	10.0	pg/l	117		78-138		
OCDF	1.43 J	0.269	20.0	pg/l	122		63-170		
Batch number: 11005001	Sample number(s): 6164970-6164971,6164973-6164985								
2378-TCDD	0.0282 J	0.0170	1.00	ng/kg	106		67-158		
12378-PeCDD	0.0679 J	0.0271	5.00	ng/kg	105		70-142		
123478-HxCDD	0.0533 J	0.0252	5.00	ng/kg	107		70-164		
123678-HxCDD	0.0419 J	0.0257	5.00	ng/kg	106		76-134		
123789-HxCDD	0.0658 J	0.0246	5.00	ng/kg	107		64-162		
1234678-HpCDD	0.225 J	0.0346	5.00	ng/kg	104		70-140		
OCDD	0.570 J	0.0410	10.0	ng/kg	104		78-144		
2378-TCDF	0.0270 J	0.0161	1.00	ng/kg	113		75-158		
12378-PeCDF	0.0507 J	0.0109	5.00	ng/kg	104		80-134		
23478-PeCDF	0.0914 J	0.0120	5.00	ng/kg	107		68-160		
123478-HxCDF	0.0754 J	0.0179	5.00	ng/kg	101		72-134		

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 05:39 PM

Group Number: 1225550

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123678-HxCDF	0.0628 J	0.0140	5.00	ng/kg	99		84-130		
123789-HxCDF	0.161 J	0.0212	5.00	ng/kg	102		78-130		
234678-HxCDF	0.0900 J	0.0162	5.00	ng/kg	101		70-156		
1234678-HpCDF	0.149 J	0.0144	5.00	ng/kg	99		82-122		
1234789-HpCDF	0.113 J	0.0296	5.00	ng/kg	101		78-138		
OCDF	0.344 J	0.0458	10.0	ng/kg	103		63-170		

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10350162401A 28a Moisture Content by 160.3	Sample number(s): 6164976-6164984 BKG: P154843 12.4 13.1 6 20								
Batch number: 10364162402A 28a Moisture Content by 160.3	Sample number(s): 6164971,6164973-6164975 BKG: P167525 11.9 12.1 1 20								
Batch number: 10364162402B 28a Moisture Content by 160.3	Sample number(s): 6164970 BKG: P163871 11.4 11.7 3 20								
Batch number: 11005162401A 28a Moisture Content by 160.3	Sample number(s): 6164985 BKG: P168986 10.0 9.9 1 20								
Batch number: 11005001	Sample number(s): 6164970-6164971,6164973-6164985 UNSPK: P165384								
2378-TCDD	105	103	67-158	2	25				
12378-PeCDD	106	105	70-142	1	25				
123478-HxCDD	106	107	70-164	1	25				
123678-HxCDD	108	104	76-134	4	25				
123789-HxCDD	107	106	64-162	1	25				
1234678-HpCDD	98	106	70-140	7	25				
OCDD	53*	102	78-144	36*	25				
2378-TCDF	109	107	75-158	2	25				
12378-PeCDF	105	105	80-134	1	25				
23478-PeCDF	105	104	68-160	0	25				
123478-HxCDF	102	100	72-134	2	25				
123678-HxCDF	99	100	84-130	0	25				
123789-HxCDF	101	99	78-130	3	25				
234678-HxCDF	101	101	70-156	0	25				
1234678-HpCDF	99	101	82-122	2	25				
1234789-HpCDF	101	101	78-138	0	25				
OCDF	100	105	63-170	4	25				

Surrogate Quality Control

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

Analysis Name: 10b Dioxin/Furan by EPA 1613B
Batch number: 10362001

*- Outside of specification

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 05:39 PM

Group Number: 1225550

Surrogate Quality Control

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6164972	11*	43	37	36	38	41
Blank	6*	70	67	66	66	69
OPR	10*	63	56	55	57	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6164972	39	38	37	22*	28	36
Blank	64	61	54	11*	32	58
OPR	55	54	48	17*	37	52
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6164972	34	33	39	38	38	39
Blank	54	49	63	55	57	68
OPR	50	46	56	48	51	60
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11005001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6164970	62	73	74	76	73	72
6164971	64	73	72	83	74	69
6164973	66	72	70	83	71	62
6164974	58	70	67	77	68	62
6164975	52	64	63	70	63	55
6164976	63	67	66	74	67	62
6164977	70	81	77	85	78	76
6164978	69	77	73	81	75	66
6164979	73	79	75	85	76	70
6164980	73	82	77	83	78	76
6164981	73	80	76	85	78	75
6164982	70	76	73	84	75	67
6164983	68	76	71	80	73	66
6164984	62	69	70	80	72	67
6164985	71	75	71	82	74	68
Blank	62	63	60	72	63	56
MS	69	79	75	85	76	70
MSD	78	87	84	87	82	84
OPR	63	64	64	73	66	62
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6164970	81	67	56	77	70	73
6164971	92	65	56	75	75	76
6164973	95	61	53	76	74	75

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/02/11 at 05:39 PM

Group Number: 1225550

Surrogate Quality Control

6164974	87	60	52	69	70	71
6164975	78	53	43	64	63	65
6164976	80	55	43	69	66	68
6164977	93	69	57	81	80	80
6164978	89	58	45	78	77	77
6164979	95	64	51	80	80	80
6164980	83	71	59	79	81	79
6164981	91	69	60	78	79	79
6164982	100	69	61	78	79	79
6164983	90	60	48	79	78	78
6164984	87	66	60	67	67	72
6164985	96	64	56	80	77	77
Blank	85	51	41	76	69	71
MS	94	65	57	79	79	80
MSD	91	80	72	85	83	83
OPR	83	59	49	71	69	70
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6164970	72	71	71	64	68	75
6164971	75	75	74	68	67	82
6164973	75	74	74	67	69	82
6164974	71	71	70	63	64	77
6164975	65	63	63	52	59	70
6164976	67	68	67	56	67	74
6164977	79	81	79	69	74	88
6164978	77	77	74	63	75	85
6164979	79	80	77	68	77	87
6164980	77	78	76	71	78	88
6164981	78	79	79	76	77	88
6164982	79	79	82	76	71	85
6164983	75	76	75	63	73	84
6164984	71	72	72	70	65	76
6164985	76	77	79	70	74	86
Blank	69	70	68	61	60	73
MS	78	79	77	70	75	87
MSD	81	82	82	75	83	89
OPR	70	70	71	62	62	73
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

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

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

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

CHAIN OF CUSTODY RECORD

No. of coolers = 5

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

January 26, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/15/2010
Group Number: 1225605
SDG: DX023
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description

SL-028-SA5C-SB-4.0-5.0 Soil
SL-028-SA5C-SB-4.0-5.0MS Soil
SL-028-SA5C-SB-4.0-5.0MSD Soil

Lancaster Labs (LLI) #

6165384
6165385
6165386

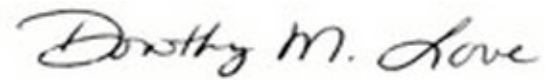
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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

Attn: Todd Burgess

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

Respectfully Submitted,



Dorothy M. Love
Group Leader



Analysis Report

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Page 1 of 4

Sample Description: SL-028-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165384
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.4	0.50	0.50	1

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

Sample Description: SL-028-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165384
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0189 U	0.0189	1.10	1
11031	12378-PeCDD	40321-76-4	0.134 JBQ	0.0323	5.52	1
11031	123478-HxCDD	39227-28-6	0.129 JBQ	0.0298	5.52	1
11031	123678-HxCDD	57653-85-7	0.401 JB	0.0309	5.52	1
11031	123789-HxCDD	19408-74-3	0.309 JBQ	0.0315	5.52	1
11031	1234678-HpCDD	35822-46-9	10.7 B	0.0497	5.52	1
11031	OCDD	3268-87-9	134 B	0.0541	11.0	1
11031	2378-TCDF	51207-31-9	0.0291 JB	0.0233	1.10	1
11031	12378-PeCDF	57117-41-6	0.127 JB	0.0141	5.52	1
11031	23478-PeCDF	57117-31-4	0.199 JB	0.0153	5.52	1
11031	123478-HxCDF	70648-26-9	0.134 JB	0.0236	5.52	1
11031	123678-HxCDF	57117-44-9	0.146 JBQ	0.0204	5.52	1
11031	123789-HxCDF	72918-21-9	0.134 JB	0.0288	5.52	1
11031	234678-HxCDF	60851-34-5	0.136 JB	0.0221	5.52	1
11031	1234678-HpCDF	67562-39-4	1.14 JB	0.0225	5.52	1
11031	1234789-HpCDF	55673-89-7	0.195 JB	0.0379	5.52	1
11031	OCDF	39001-02-0	2.57 JB	0.0371	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-028-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165384
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17BKG

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

Sample Description: SL-028-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165384
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17BKG

General Sample Comments

State of California Lab Certification No. 2501

This sample was originally submitted to the laboratory on 12/07/10 at 09:45. We received authorization for further testing on 12/12/10.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 10:17	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162401A	12/22/2010 20:45	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-028-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165385
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.4	0.50	0.50	1

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

Sample Description: SL-028-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165385
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.2	B	0.0247	1
11031	12378-PeCDD	40321-76-4	118	B	0.0371	1
11031	123478-HxCDD	39227-28-6	117	B	0.0299	1
11031	123678-HxCDD	57653-85-7	119	B	0.0305	1
11031	123789-HxCDD	19408-74-3	118	B	0.0305	1
11031	1234678-HpCDD	35822-46-9	118	B	0.0568	1
11031	OCDD	3268-87-9	250	B	0.0454	1
11031	2378-TCDF	51207-31-9	24.1	B	0.0253	1
11031	12378-PeCDF	57117-41-6	116	B	0.0156	1
11031	23478-PeCDF	57117-31-4	116	B	0.0160	1
11031	123478-HxCDF	70648-26-9	113	B	0.0519	1
11031	123678-HxCDF	57117-44-9	110	B	0.0433	1
11031	123789-HxCDF	72918-21-9	112	B	0.0594	1
11031	234678-HxCDF	60851-34-5	111	B	0.0485	1
11031	1234678-HpCDF	67562-39-4	111	B	0.0329	1
11031	1234789-HpCDF	55673-89-7	112	B	0.0574	1
11031	OCDF	39001-02-0	224	B	0.0539	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-028-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165385
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17MS

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

Sample Description: SL-028-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165385
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17MS

General Sample Comments

State of California Lab Certification No. 2501

This sample was originally submitted to the laboratory on 12/07/10 at 09:45. We received authorization for further testing on 12/12/10.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 11:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162401A	12/22/2010 20:45	Scott W Freisher	1



Analysis Report

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Sample Description: SL-028-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165386
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17MSD*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	EPA 160.3 modified		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	9.4	0.50	0.50	1

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

Sample Description: SL-028-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165386
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17MSD*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.6	B	0.0214	1
11031	12378-PeCDD	40321-76-4	116	B	0.0361	1
11031	123478-HxCDD	39227-28-6	118	B	0.0323	1
11031	123678-HxCDD	57653-85-7	115	B	0.0340	1
11031	123789-HxCDD	19408-74-3	117	B	0.0322	1
11031	1234678-HpCDD	35822-46-9	128	B	0.0626	1
11031	OCDD	3268-87-9	360	B	0.0512	1
11031	2378-TCDF	51207-31-9	23.5	B	0.0262	1
11031	12378-PeCDF	57117-41-6	116	B	0.0141	1
11031	23478-PeCDF	57117-31-4	116	B	0.0140	1
11031	123478-HxCDF	70648-26-9	110	B	0.0348	1
11031	123678-HxCDF	57117-44-9	110	B	0.0316	1
11031	123789-HxCDF	72918-21-9	109	B	0.0377	1
11031	234678-HxCDF	60851-34-5	112	B	0.0338	1
11031	1234678-HpCDF	67562-39-4	113	B	0.0405	1
11031	1234789-HpCDF	55673-89-7	111	B	0.0577	1
11031	OCDF	39001-02-0	234	B	0.0380	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-028-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165386
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17MSD*

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

Sample Description: SL-028-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-028-SA5C-SB-4.0-5.0

LLI Sample # SW 6165386
LLI Group # 1225605
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:50 by PH

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

Submitted: 12/15/2010 16:20

Reported: 01/26/2011 14:46

X2317 SDG#: DX023-17MSD*

General Sample Comments

State of California Lab Certification No. 2501

This sample was originally submitted to the laboratory on 12/07/10 at 09:45. We received authorization for further testing on 12/12/10.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 12:10	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162401A	12/22/2010 20:45	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:46 PM

Group Number: 1225605

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10356162401A 28a Moisture Content by 160.3	Sample number(s): 6165384-6165386				99		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11005001	Sample number(s): 6165384-6165386								
2378-TCDD	0.0282 J	0.0170	1.00	ng/kg	106		67-158		
12378-PeCDD	0.0679 J	0.0271	5.00	ng/kg	105		70-142		
123478-HxCDD	0.0533 J	0.0252	5.00	ng/kg	107		70-164		
123678-HxCDD	0.0419 J	0.0257	5.00	ng/kg	106		76-134		
123789-HxCDD	0.0658 J	0.0246	5.00	ng/kg	107		64-162		
1234678-HpCDD	0.225 J	0.0346	5.00	ng/kg	104		70-140		
OCDD	0.570 J	0.0410	10.0	ng/kg	104		78-144		
2378-TCDF	0.0270 J	0.0161	1.00	ng/kg	113		75-158		
12378-PeCDF	0.0507 J	0.0109	5.00	ng/kg	104		80-134		
23478-PeCDF	0.0914 J	0.0120	5.00	ng/kg	107		68-160		
123478-HxCDF	0.0754 J	0.0179	5.00	ng/kg	101		72-134		
123678-HxCDF	0.0628 J	0.0140	5.00	ng/kg	99		84-130		
123789-HxCDF	0.161 J	0.0212	5.00	ng/kg	102		78-130		
234678-HxCDF	0.0900 J	0.0162	5.00	ng/kg	101		70-156		
1234678-HpCDF	0.149 J	0.0144	5.00	ng/kg	99		82-122		
1234789-HpCDF	0.113 J	0.0296	5.00	ng/kg	101		78-138		
OCDF	0.344 J	0.0458	10.0	ng/kg	103		63-170		

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10356162401A 28a Moisture Content by 160.3	Sample number(s): 6165384-6165386					BKG: P157195 9.4	9.8	4	20
Batch number: 11005001	Sample number(s): 6165384-6165386					UNSPK: 6165384			
2378-TCDD	105	103	67-158	2	25				
12378-PeCDD	106	105	70-142	1	25				
123478-HxCDD	106	107	70-164	1	25				
123678-HxCDD	108	104	76-134	4	25				
123789-HxCDD	107	106	64-162	1	25				
1234678-HpCDD	98	106	70-140	7	25				
OCDD	53*	102	78-144	36*	25				

*- Outside of specification

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:46 PM

Group Number: 1225605

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDF	109	107	75-158	2	25				
12378-PeCDF	105	105	80-134	1	25				
23478-PeCDF	105	104	68-160	0	25				
123478-HxCDF	102	100	72-134	2	25				
123678-HxCDF	99	100	84-130	0	25				
123789-HxCDF	101	99	78-130	3	25				
234678-HxCDF	101	101	70-156	0	25				
1234678-HpCDF	99	101	82-122	2	25				
1234789-HpCDF	101	101	78-138	0	25				
OCDF	100	105	63-170	4	25				

Surrogate Quality Control

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

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11005001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6165384	71	75	74	83	74	69
6165385	69	79	75	85	76	70
6165386	78	87	84	87	82	84
Blank	62	63	60	72	63	56
MS	69	79	75	85	76	70
MSD	78	87	84	87	82	84
OPR	63	64	64	73	66	62
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6165384	90	65	56	80	75	77
6165385	94	65	57	79	79	80
6165386	91	80	72	85	83	83
Blank	85	51	41	76	69	71
MS	94	65	57	79	79	80
MSD	91	80	72	85	83	83
OPR	83	59	49	71	69	70
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6165384	76	76	75	67	75	84
6165385	78	79	77	70	75	87
6165386	81	82	82	75	83	89
Blank	69	70	68	61	60	73
MS	78	79	77	70	75	87

*- Outside of specification

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 01/26/11 at 02:46 PM

Group Number: 1225605

Surrogate Quality Control

MSD	81	82	82	75	83	89
OPR	70	70	71	62	62	73
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

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

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

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



Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Shipping Container Sealed: (YES) NO

Date of Receipt: 12/15/10

Custody Seal Present *: (YES) NO

Time of Receipt: 940

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

Source Code: 50-1

Unpacker Emp. No.: 2316

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	0413	2.30C	TB	WI	Y	B	
2		3.80C					
3		3.20C					
4		3.60C					
5		2.40C					
6							

Number of Trip Blanks received NOT listed on chain of custody. 0

Paperwork Discrepancy/Unpacking Problems:

SB-4.5

The missing enclosures were received on 12/16/10.

- Direct receive SL-004-SASC-50-9.5 enclose samples. NLM 12/17/10

- SL-311-SA5B-SS-0.0-0.5 has wrong time of 1345.

- The bottle labels for EBO2 were labeled EB-016. The client confirmed the EB ID should be EBO2-SA5B-12/410. NLM 1/5/11

Sample Administration Internal Chain of Custody

Name	Date	Time	Reason for Transfer
<i>[Signature]</i>	12/15/10	1115	Unpacking to storage
<i>[Signature]</i>	12/15/10	1423	Place in Storage or <u>(Entry)</u>
			Entry
			Entry

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

February 07, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 01/05/2011
Group Number: 1227828
SDG: DX035
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description

SL-146-SA5B-SB-4.0-5.0 Soil
SL-140-SA5C-SS-0.0-0.5 Soil
SL-039-SA5C-SS-0.0-0.5 Soil
SL-036-SA5C-SS-0.0-0.5 Soil
SL-097-SA5C-SS-0.0-0.5 Soil
SL-259-SA5B-SB-4.0-5.0 Soil

Lancaster Labs (LLI)

6177809
6177810
6177811
6177812
6177813
6177814

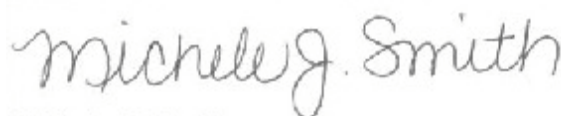
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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

Attn: Todd Burgess

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

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

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

Page 1 of 4

Sample Description: SL-146-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-146-SA5B-SB-4.0-5.0

LLI Sample # SW 6177809
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:58

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL146 SDG#: DX035-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.4	0.50	0.50	1

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

Sample Description: SL-146-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-146-SA5B-SB-4.0-5.0

LLI Sample # SW 6177809
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:58

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL146 SDG#: DX035-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0366 U	0.0366	1.15	1
11031	12378-PeCDD	40321-76-4	0.0663 JBQ	0.0320	5.77	1
11031	123478-HxCDD	39227-28-6	0.0345 JQ	0.0292	5.77	1
11031	123678-HxCDD	57653-85-7	0.142 JQ	0.0286	5.77	1
11031	123789-HxCDD	19408-74-3	0.281 J	0.0278	5.77	1
11031	1234678-HpCDD	35822-46-9	0.334 JBQ	0.0357	5.77	1
11031	OCDD	3268-87-9	2.72 JB	0.0286	11.5	1
11031	2378-TCDF	51207-31-9	0.0410 U	0.0410	1.15	1
11031	12378-PeCDF	57117-41-6	0.0642 JBQ	0.0192	5.77	1
11031	23478-PeCDF	57117-31-4	0.0890 JBQ	0.0176	5.77	1
11031	123478-HxCDF	70648-26-9	0.0580 JBQ	0.0194	5.77	1
11031	123678-HxCDF	57117-44-9	0.0496 JBQ	0.0170	5.77	1
11031	123789-HxCDF	72918-21-9	0.162 JBQ	0.0193	5.77	1
11031	234678-HxCDF	60851-34-5	0.0468 JBQ	0.0176	5.77	1
11031	1234678-HpCDF	67562-39-4	0.140 JB	0.0135	5.77	1
11031	1234789-HpCDF	55673-89-7	0.0490 JBQ	0.0196	5.77	1
11031	OCDF	39001-02-0	0.243 JBQ	0.0394	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-146-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-146-SA5B-SB-4.0-5.0

LLI Sample # SW 6177809
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:58

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL146 SDG#: DX035-01

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

Sample Description: SL-146-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-146-SA5B-SB-4.0-5.0

LLI Sample # SW 6177809
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:58

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL146 SDG#: DX035-01

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/29/2011 19:43	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401A	01/19/2011 19:05	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-140-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SS-0.0-0.5

LLI Sample # SW 6177810
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:18

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL140 SDG#: DX035-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.7	0.50	0.50	1

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

Sample Description: SL-140-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SS-0.0-0.5

LLI Sample # SW 6177810
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:18

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL140 SDG#: DX035-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0717 JQ	0.0445	1.16	1
11031	12378-PeCDD	40321-76-4	0.236 JBQ	0.0589	5.79	1
11031	123478-HxCDD	39227-28-6	0.513 JQ	0.0678	5.79	1
11031	123678-HxCDD	57653-85-7	1.74 J	0.0692	5.79	1
11031	123789-HxCDD	19408-74-3	0.809 J	0.0686	5.79	1
11031	1234678-HpCDD	35822-46-9	46.0 B	0.0962	5.79	1
11031	OCDD	3268-87-9	526 B	0.0829	11.6	1
11031	2378-TCDF	51207-31-9	0.0707 U	0.0707	1.16	1
11031	12378-PeCDF	57117-41-6	0.329 JB	0.0330	5.79	1
11031	23478-PeCDF	57117-31-4	0.349 JB	0.0312	5.79	1
11031	123478-HxCDF	70648-26-9	0.337 JB	0.0426	5.79	1
11031	123678-HxCDF	57117-44-9	0.297 JB	0.0382	5.79	1
11031	123789-HxCDF	72918-21-9	0.177 JB	0.0402	5.79	1
11031	234678-HxCDF	60851-34-5	0.382 JB	0.0392	5.79	1
11031	1234678-HpCDF	67562-39-4	4.92 JB	0.0374	5.79	1
11031	1234789-HpCDF	55673-89-7	0.476 JBQ	0.0419	5.79	1
11031	OCDF	39001-02-0	14.4 B	0.0440	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	89	26 - 138
13C12-OCDF	89	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-140-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SS-0.0-0.5

LLI Sample # SW 6177810
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:18

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL140 SDG#: DX035-02

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

Sample Description: SL-140-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SS-0.0-0.5

LLI Sample # SW 6177810
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:18

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 01/05/2011 09:00

Suite 210

Reported: 02/07/2011 23:41

Chantilly VA 20151

DL140 SDG#: DX035-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/29/2011 20:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11012162401A	01/12/2011 18:17	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-039-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-039-SA5C-SS-0.0-0.5

LLI Sample # SW 6177811
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:48

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL039 SDG#: DX035-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

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

Sample Description: SL-039-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-039-SA5C-SS-0.0-0.5

LLI Sample # SW 6177811
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:48

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL039 SDG#: DX035-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0427 U	0.0427	1.14	1
11031	12378-PeCDD	40321-76-4	0.112 JBQ	0.0414	5.72	1
11031	123478-HxCDD	39227-28-6	0.0795 JQ	0.0572	5.72	1
11031	123678-HxCDD	57653-85-7	0.770 JQ	0.0598	5.72	1
11031	123789-HxCDD	19408-74-3	0.355 J	0.0570	5.72	1
11031	1234678-HpCDD	35822-46-9	17.8 B	0.0743	5.72	1
11031	OCDD	3268-87-9	123 B	0.100	11.4	1
11031	2378-TCDF	51207-31-9	0.0475 U	0.0475	1.14	1
11031	12378-PeCDF	57117-41-6	0.346 JBQ	0.0265	5.72	1
11031	23478-PeCDF	57117-31-4	0.191 JBQ	0.0249	5.72	1
11031	123478-HxCDF	70648-26-9	0.178 JBQ	0.0373	5.72	1
11031	123678-HxCDF	57117-44-9	0.127 JB	0.0370	5.72	1
11031	123789-HxCDF	72918-21-9	0.175 JB	0.0412	5.72	1
11031	234678-HxCDF	60851-34-5	0.178 JBQ	0.0381	5.72	1
11031	1234678-HpCDF	67562-39-4	2.64 JB	0.0470	5.72	1
11031	1234789-HpCDF	55673-89-7	0.183 JB	0.0505	5.72	1
11031	OCDF	39001-02-0	2.72 JB	0.0708	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	90	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-039-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-039-SA5C-SS-0.0-0.5

LLI Sample # SW 6177811
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:48

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL039 SDG#: DX035-03

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

Sample Description: SL-039-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-039-SA5C-SS-0.0-0.5

LLI Sample # SW 6177811
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:48

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL039 SDG#: DX035-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/29/2011 21:36	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11012162401A	01/12/2011 18:17	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-036-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5C-SS-0.0-0.5

LLI Sample # SW 6177812
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 10:15

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL036 SDG#: DX035-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.0	0.50	0.50	1

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

Sample Description: SL-036-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5C-SS-0.0-0.5

LLI Sample # SW 6177812
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 10:15

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL036 SDG#: DX035-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0385 U	0.0385	1.19	1
11031	12378-PeCDD	40321-76-4	0.0991 JBQ	0.0513	5.95	1
11031	123478-HxCDD	39227-28-6	0.187 JQ	0.0637	5.95	1
11031	123678-HxCDD	57653-85-7	0.733 JQ	0.0645	5.95	1
11031	123789-HxCDD	19408-74-3	0.394 J	0.0631	5.95	1
11031	1234678-HpCDD	35822-46-9	16.3 B	0.0821	5.95	1
11031	OCDD	3268-87-9	214 B	0.103	11.9	1
11031	2378-TCDF	51207-31-9	0.0447 JBQ	0.0433	1.19	1
11031	12378-PeCDF	57117-41-6	0.467 JB	0.0292	5.95	1
11031	23478-PeCDF	57117-31-4	0.0274 U	0.0274	5.95	1
11031	123478-HxCDF	70648-26-9	0.198 JBQ	0.0387	5.95	1
11031	123678-HxCDF	57117-44-9	0.197 JBQ	0.0369	5.95	1
11031	123789-HxCDF	72918-21-9	0.265 JB	0.0401	5.95	1
11031	234678-HxCDF	60851-34-5	0.158 JB	0.0368	5.95	1
11031	1234678-HpCDF	67562-39-4	2.28 JB	0.0439	5.95	1
11031	1234789-HpCDF	55673-89-7	0.149 JBQ	0.0519	5.95	1
11031	OCDF	39001-02-0	1.94 JB	0.0736	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	84	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-036-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5C-SS-0.0-0.5

LLI Sample # SW 6177812
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 10:15

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL036 SDG#: DX035-04

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

Sample Description: SL-036-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5C-SS-0.0-0.5

LLI Sample # SW 6177812
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 10:15

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL036 SDG#: DX035-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/29/2011 22:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11012162401A	01/12/2011 18:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-097-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-097-SA5C-SS-0.0-0.5

LLI Sample # SW 6177813
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:12

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL097 SDG#: DX035-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	15.8	0.50	0.50	1

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

Sample Description: SL-097-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-097-SA5C-SS-0.0-0.5

LLI Sample # SW 6177813
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:12

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL097 SDG#: DX035-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0292 U	0.0292	1.19	1
11031	12378-PeCDD	40321-76-4	0.0368 U	0.0368	5.94	1
11031	123478-HxCDD	39227-28-6	0.0884 JQ	0.0455	5.94	1
11031	123678-HxCDD	57653-85-7	0.392 JQ	0.0469	5.94	1
11031	123789-HxCDD	19408-74-3	0.276 J	0.0438	5.94	1
11031	1234678-HpCDD	35822-46-9	9.09 B	0.0620	5.94	1
11031	OCDD	3268-87-9	93.8 B	0.0669	11.9	1
11031	2378-TCDF	51207-31-9	0.0491 JBQ	0.0291	1.19	1
11031	12378-PeCDF	57117-41-6	0.246 JBQ	0.0217	5.94	1
11031	23478-PeCDF	57117-31-4	0.150 JBQ	0.0204	5.94	1
11031	123478-HxCDF	70648-26-9	0.222 JB	0.0323	5.94	1
11031	123678-HxCDF	57117-44-9	0.165 JB	0.0285	5.94	1
11031	123789-HxCDF	72918-21-9	0.182 JBQ	0.0278	5.94	1
11031	234678-HxCDF	60851-34-5	0.0909 JB	0.0259	5.94	1
11031	1234678-HpCDF	67562-39-4	1.08 JB	0.0338	5.94	1
11031	1234789-HpCDF	55673-89-7	0.145 JBQ	0.0362	5.94	1
11031	OCDF	39001-02-0	2.26 JB	0.0593	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	89	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	85	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	86	26 - 138
13C12-OCDF	79	17 - 157
13C12-1278-TCDD (CRS)	93	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-097-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-097-SA5C-SS-0.0-0.5

LLI Sample # SW 6177813
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:12

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL097 SDG#: DX035-05

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

Sample Description: SL-097-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-097-SA5C-SS-0.0-0.5

LLI Sample # SW 6177813
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:12

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 01/05/2011 09:00

Suite 210

Reported: 02/07/2011 23:41

Chantilly VA 20151

DL097 SDG#: DX035-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/29/2011 23:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11012162401A	01/12/2011 18:17	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-259-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-259-SA5B-SB-4.0-5.0

LLI Sample # SW 6177814
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 15:02

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL259 SDG#: DX035-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.2	0.50	0.50	1

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

Sample Description: SL-259-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-259-SA5B-SB-4.0-5.0

LLI Sample # SW 6177814
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 15:02

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL259 SDG#: DX035-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0354 U	0.0354	1.10	1
11031	12378-PeCDD	40321-76-4	0.0303 U	0.0303	5.51	1
11031	123478-HxCDD	39227-28-6	0.0235 U	0.0235	5.51	1
11031	123678-HxCDD	57653-85-7	0.0250 U	0.0250	5.51	1
11031	123789-HxCDD	19408-74-3	0.0533 JQ	0.0238	5.51	1
11031	1234678-HpCDD	35822-46-9	0.235 JB	0.0384	5.51	1
11031	OCDD	3268-87-9	0.657 JB	0.0444	11.0	1
11031	2378-TCDF	51207-31-9	0.0306 JBQ	0.0268	1.10	1
11031	12378-PeCDF	57117-41-6	0.0265 JBQ	0.0151	5.51	1
11031	23478-PeCDF	57117-31-4	0.0629 JBQ	0.0160	5.51	1
11031	123478-HxCDF	70648-26-9	0.0335 JBQ	0.0170	5.51	1
11031	123678-HxCDF	57117-44-9	0.0358 JBQ	0.0146	5.51	1
11031	123789-HxCDF	72918-21-9	0.0193 U	0.0193	5.51	1
11031	234678-HxCDF	60851-34-5	0.0404 JB	0.0163	5.51	1
11031	1234678-HpCDF	67562-39-4	0.106 JBQ	0.0161	5.51	1
11031	1234789-HpCDF	55673-89-7	0.0485 JB	0.0261	5.51	1
11031	OCDF	39001-02-0	0.174 JB	0.0480	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-259-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-259-SA5B-SB-4.0-5.0

LLI Sample # SW 6177814
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 15:02

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL259 SDG#: DX035-06

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

Sample Description: SL-259-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-259-SA5B-SB-4.0-5.0

LLI Sample # SW 6177814
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 15:02

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 01/05/2011 09:00

Suite 210

Reported: 02/07/2011 23:41

Chantilly VA 20151

DL259 SDG#: DX035-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/30/2011 00:27	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11012162401A	01/12/2011 18:17	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/07/11 at 11:41 PM

Group Number: 1227828

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

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11012162401A 28a Moisture Content by 160.3	Sample number(s): 6177810-6177814				100		80-120		
Batch number: 11019162401A 28a Moisture Content by 160.3	Sample number(s): 6177809				100		80-120		

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11020001	Sample number(s): 6177809-6177814								
2378-TCDD	0.0279 U	0.0279	1.00	ng/kg	87		67-158		
12378-PeCDD	0.0513 J	0.0236	5.00	ng/kg	87		70-142		
123478-HxCDD	0.0187 U	0.0187	5.00	ng/kg	86		70-164		
123678-HxCDD	0.0189 U	0.0189	5.00	ng/kg	84		76-134		
123789-HxCDD	0.0176 U	0.0176	5.00	ng/kg	83		64-162		
1234678-HpCDD	0.183 J	0.0270	5.00	ng/kg	85		70-140		
OCDD	0.571 J	0.0211	10.0	ng/kg	84		78-144		
2378-TCDF	0.0348 J	0.0267	1.00	ng/kg	95		75-158		
12378-PeCDF	0.0256 J	0.0123	5.00	ng/kg	86		80-134		
23478-PeCDF	0.0826 J	0.0124	5.00	ng/kg	85		68-160		
123478-HxCDF	0.0256 J	0.0157	5.00	ng/kg	83		72-134		
123678-HxCDF	0.0217 J	0.0122	5.00	ng/kg	84		84-130		
123789-HxCDF	0.0440 J	0.0140	5.00	ng/kg	83		78-130		
234678-HxCDF	0.0379 J	0.0124	5.00	ng/kg	83		70-156		
1234678-HpCDF	0.120 J	0.0103	5.00	ng/kg	82		82-122		
1234789-HpCDF	0.0341 J	0.0145	5.00	ng/kg	83		78-138		
OCDF	0.203 J	0.0272	10.0	ng/kg	84		63-170		

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11012162401A 28a Moisture Content by 160.3	Sample number(s): 6177810-6177814					BKG: P177805 9.2	9.5	3	20
Batch number: 11019162401A 28a Moisture Content by 160.3	Sample number(s): 6177809					BKG: P183549 13.8	13.9	1	20

*- Outside of specification

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/07/11 at 11:41 PM

Group Number: 1227828

Surrogate Quality Control

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

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11020001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6177809	68	80	68	75	72	77
6177810	74	82	73	77	77	85
6177811	78	86	78	74	77	83
6177812	71	81	71	71	72	76
6177813	80	90	65	73	78	85
6177814	69	78	67	75	71	69
Blank	81	89	71	87	86	88
OPR	74	82	69	80	74	73
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6177809	86	77	74	81	87	74
6177810	82	89	89	86	88	78
6177811	74	79	59	90	86	81
6177812	75	79	74	84	80	77
6177813	73	86	79	93	89	80
6177814	89	70	64	85	84	79
Blank	96	89	90	99	92	87
OPR	94	76	76	88	88	80
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6177809	78	76	83	83	68	80
6177810	79	79	89	92	79	83
6177811	76	79	78	58	82	86
6177812	74	75	80	76	76	80
6177813	79	82	86	82	85	87
6177814	76	80	84	81	70	84
Blank	89	93	100	103	81	98
OPR	82	84	90	92	73	91
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

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

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

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

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

February 07, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 01/05/2011
Group Number: 1227828
SDG: DX035
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description

SL-146-SA5B-SB-4.0-5.0 Soil
SL-140-SA5C-SS-0.0-0.5 Soil
SL-039-SA5C-SS-0.0-0.5 Soil
SL-036-SA5C-SS-0.0-0.5 Soil
SL-097-SA5C-SS-0.0-0.5 Soil
SL-259-SA5B-SB-4.0-5.0 Soil

Lancaster Labs (LLI)

6177809
6177810
6177811
6177812
6177813
6177814

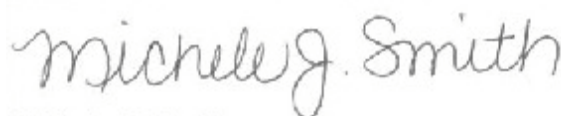
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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

Attn: Todd Burgess

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

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

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

Page 1 of 4

Sample Description: SL-146-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-146-SA5B-SB-4.0-5.0

LLI Sample # SW 6177809
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:58

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL146 SDG#: DX035-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.4	0.50	0.50	1

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

Sample Description: SL-146-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-146-SA5B-SB-4.0-5.0

LLI Sample # SW 6177809
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:58

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL146 SDG#: DX035-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0366 U	0.0366	1.15	1
11031	12378-PeCDD	40321-76-4	0.0663 JBQ	0.0320	5.77	1
11031	123478-HxCDD	39227-28-6	0.0345 JQ	0.0292	5.77	1
11031	123678-HxCDD	57653-85-7	0.142 JQ	0.0286	5.77	1
11031	123789-HxCDD	19408-74-3	0.281 J	0.0278	5.77	1
11031	1234678-HpCDD	35822-46-9	0.334 JBQ	0.0357	5.77	1
11031	OCDD	3268-87-9	2.72 JB	0.0286	11.5	1
11031	2378-TCDF	51207-31-9	0.0410 U	0.0410	1.15	1
11031	12378-PeCDF	57117-41-6	0.0642 JBQ	0.0192	5.77	1
11031	23478-PeCDF	57117-31-4	0.0890 JBQ	0.0176	5.77	1
11031	123478-HxCDF	70648-26-9	0.0580 JBQ	0.0194	5.77	1
11031	123678-HxCDF	57117-44-9	0.0496 JBQ	0.0170	5.77	1
11031	123789-HxCDF	72918-21-9	0.162 JBQ	0.0193	5.77	1
11031	234678-HxCDF	60851-34-5	0.0468 JBQ	0.0176	5.77	1
11031	1234678-HpCDF	67562-39-4	0.140 JB	0.0135	5.77	1
11031	1234789-HpCDF	55673-89-7	0.0490 JBQ	0.0196	5.77	1
11031	OCDF	39001-02-0	0.243 JBQ	0.0394	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-146-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-146-SA5B-SB-4.0-5.0

LLI Sample # SW 6177809
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:58

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL146 SDG#: DX035-01

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

Sample Description: SL-146-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-146-SA5B-SB-4.0-5.0

LLI Sample # SW 6177809
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:58

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL146 SDG#: DX035-01

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/29/2011 19:43	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401A	01/19/2011 19:05	Scott W Freisher	1



Analysis Report

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Sample Description: SL-140-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SS-0.0-0.5

LLI Sample # SW 6177810
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:18

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL140 SDG#: DX035-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	13.7	0.50	0.50	1

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

Sample Description: SL-140-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SS-0.0-0.5

LLI Sample # SW 6177810
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:18

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL140 SDG#: DX035-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0717 JQ	0.0445	1.16	1
11031	12378-PeCDD	40321-76-4	0.236 JBQ	0.0589	5.79	1
11031	123478-HxCDD	39227-28-6	0.513 JQ	0.0678	5.79	1
11031	123678-HxCDD	57653-85-7	1.74 J	0.0692	5.79	1
11031	123789-HxCDD	19408-74-3	0.809 J	0.0686	5.79	1
11031	1234678-HpCDD	35822-46-9	46.0 B	0.0962	5.79	1
11031	OCDD	3268-87-9	526 B	0.0829	11.6	1
11031	2378-TCDF	51207-31-9	0.0707 U	0.0707	1.16	1
11031	12378-PeCDF	57117-41-6	0.329 JB	0.0330	5.79	1
11031	23478-PeCDF	57117-31-4	0.349 JB	0.0312	5.79	1
11031	123478-HxCDF	70648-26-9	0.337 JB	0.0426	5.79	1
11031	123678-HxCDF	57117-44-9	0.297 JB	0.0382	5.79	1
11031	123789-HxCDF	72918-21-9	0.177 JB	0.0402	5.79	1
11031	234678-HxCDF	60851-34-5	0.382 JB	0.0392	5.79	1
11031	1234678-HpCDF	67562-39-4	4.92 JB	0.0374	5.79	1
11031	1234789-HpCDF	55673-89-7	0.476 JBQ	0.0419	5.79	1
11031	OCDF	39001-02-0	14.4 B	0.0440	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	89	26 - 138
13C12-OCDF	89	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-140-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SS-0.0-0.5

LLI Sample # SW 6177810
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:18

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL140 SDG#: DX035-02

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

Sample Description: SL-140-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SS-0.0-0.5

LLI Sample # SW 6177810
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:18

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 01/05/2011 09:00

Suite 210

Reported: 02/07/2011 23:41

Chantilly VA 20151

DL140 SDG#: DX035-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/29/2011 20:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11012162401A	01/12/2011 18:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-039-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-039-SA5C-SS-0.0-0.5

LLI Sample # SW 6177811
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:48

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL039 SDG#: DX035-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

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

Sample Description: SL-039-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-039-SA5C-SS-0.0-0.5

LLI Sample # SW 6177811
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:48

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL039 SDG#: DX035-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0427 U	0.0427	1.14	1
11031	12378-PeCDD	40321-76-4	0.112 JBQ	0.0414	5.72	1
11031	123478-HxCDD	39227-28-6	0.0795 JQ	0.0572	5.72	1
11031	123678-HxCDD	57653-85-7	0.770 JQ	0.0598	5.72	1
11031	123789-HxCDD	19408-74-3	0.355 J	0.0570	5.72	1
11031	1234678-HpCDD	35822-46-9	17.8 B	0.0743	5.72	1
11031	OCDD	3268-87-9	123 B	0.100	11.4	1
11031	2378-TCDF	51207-31-9	0.0475 U	0.0475	1.14	1
11031	12378-PeCDF	57117-41-6	0.346 JBQ	0.0265	5.72	1
11031	23478-PeCDF	57117-31-4	0.191 JBQ	0.0249	5.72	1
11031	123478-HxCDF	70648-26-9	0.178 JBQ	0.0373	5.72	1
11031	123678-HxCDF	57117-44-9	0.127 JB	0.0370	5.72	1
11031	123789-HxCDF	72918-21-9	0.175 JB	0.0412	5.72	1
11031	234678-HxCDF	60851-34-5	0.178 JBQ	0.0381	5.72	1
11031	1234678-HpCDF	67562-39-4	2.64 JB	0.0470	5.72	1
11031	1234789-HpCDF	55673-89-7	0.183 JB	0.0505	5.72	1
11031	OCDF	39001-02-0	2.72 JB	0.0708	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	90	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-039-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-039-SA5C-SS-0.0-0.5

LLI Sample # SW 6177811
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:48

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL039 SDG#: DX035-03

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

Sample Description: SL-039-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-039-SA5C-SS-0.0-0.5

LLI Sample # SW 6177811
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 09:48

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL039 SDG#: DX035-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/29/2011 21:36	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11012162401A	01/12/2011 18:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-036-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5C-SS-0.0-0.5

LLI Sample # SW 6177812
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 10:15

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL036 SDG#: DX035-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	16.0	0.50	0.50	1

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

Sample Description: SL-036-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5C-SS-0.0-0.5

LLI Sample # SW 6177812
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 10:15

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL036 SDG#: DX035-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0385 U	0.0385	1.19	1
11031	12378-PeCDD	40321-76-4	0.0991 JBQ	0.0513	5.95	1
11031	123478-HxCDD	39227-28-6	0.187 JQ	0.0637	5.95	1
11031	123678-HxCDD	57653-85-7	0.733 JQ	0.0645	5.95	1
11031	123789-HxCDD	19408-74-3	0.394 J	0.0631	5.95	1
11031	1234678-HpCDD	35822-46-9	16.3 B	0.0821	5.95	1
11031	OCDD	3268-87-9	214 B	0.103	11.9	1
11031	2378-TCDF	51207-31-9	0.0447 JBQ	0.0433	1.19	1
11031	12378-PeCDF	57117-41-6	0.467 JB	0.0292	5.95	1
11031	23478-PeCDF	57117-31-4	0.0274 U	0.0274	5.95	1
11031	123478-HxCDF	70648-26-9	0.198 JBQ	0.0387	5.95	1
11031	123678-HxCDF	57117-44-9	0.197 JBQ	0.0369	5.95	1
11031	123789-HxCDF	72918-21-9	0.265 JB	0.0401	5.95	1
11031	234678-HxCDF	60851-34-5	0.158 JB	0.0368	5.95	1
11031	1234678-HpCDF	67562-39-4	2.28 JB	0.0439	5.95	1
11031	1234789-HpCDF	55673-89-7	0.149 JBQ	0.0519	5.95	1
11031	OCDF	39001-02-0	1.94 JB	0.0736	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	84	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-036-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5C-SS-0.0-0.5

LLI Sample # SW 6177812
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 10:15

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL036 SDG#: DX035-04

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

Sample Description: SL-036-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-036-SA5C-SS-0.0-0.5

LLI Sample # SW 6177812
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 10:15

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL036 SDG#: DX035-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/29/2011 22:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11012162401A	01/12/2011 18:17	Scott W Freisher	1



Analysis Report

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Sample Description: SL-097-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-097-SA5C-SS-0.0-0.5

LLI Sample # SW 6177813
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:12

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL097 SDG#: DX035-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	15.8	0.50	0.50	1

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

Sample Description: SL-097-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-097-SA5C-SS-0.0-0.5

LLI Sample # SW 6177813
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:12

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL097 SDG#: DX035-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0292 U	0.0292	1.19	1
11031	12378-PeCDD	40321-76-4	0.0368 U	0.0368	5.94	1
11031	123478-HxCDD	39227-28-6	0.0884 JQ	0.0455	5.94	1
11031	123678-HxCDD	57653-85-7	0.392 JQ	0.0469	5.94	1
11031	123789-HxCDD	19408-74-3	0.276 J	0.0438	5.94	1
11031	1234678-HpCDD	35822-46-9	9.09 B	0.0620	5.94	1
11031	OCDD	3268-87-9	93.8 B	0.0669	11.9	1
11031	2378-TCDF	51207-31-9	0.0491 JBQ	0.0291	1.19	1
11031	12378-PeCDF	57117-41-6	0.246 JBQ	0.0217	5.94	1
11031	23478-PeCDF	57117-31-4	0.150 JBQ	0.0204	5.94	1
11031	123478-HxCDF	70648-26-9	0.222 JB	0.0323	5.94	1
11031	123678-HxCDF	57117-44-9	0.165 JB	0.0285	5.94	1
11031	123789-HxCDF	72918-21-9	0.182 JBQ	0.0278	5.94	1
11031	234678-HxCDF	60851-34-5	0.0909 JB	0.0259	5.94	1
11031	1234678-HpCDF	67562-39-4	1.08 JB	0.0338	5.94	1
11031	1234789-HpCDF	55673-89-7	0.145 JBQ	0.0362	5.94	1
11031	OCDF	39001-02-0	2.26 JB	0.0593	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	89	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	85	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	86	26 - 138
13C12-OCDF	79	17 - 157
13C12-1278-TCDD (CRS)	93	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-097-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-097-SA5C-SS-0.0-0.5

LLI Sample # SW 6177813
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:12

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL097 SDG#: DX035-05

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

Sample Description: SL-097-SA5C-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-097-SA5C-SS-0.0-0.5

LLI Sample # SW 6177813
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 11:12

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 01/05/2011 09:00

Suite 210

Reported: 02/07/2011 23:41

Chantilly VA 20151

DL097 SDG#: DX035-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/29/2011 23:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11012162401A	01/12/2011 18:17	Scott W Freisher	1



Analysis Report

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

Page 1 of 4

Sample Description: SL-259-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-259-SA5B-SB-4.0-5.0

LLI Sample # SW 6177814
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 15:02

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL259 SDG#: DX035-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	9.2	0.50	0.50	1

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

Sample Description: SL-259-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-259-SA5B-SB-4.0-5.0

LLI Sample # SW 6177814
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 15:02

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL259 SDG#: DX035-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0354 U	0.0354	1.10	1
11031	12378-PeCDD	40321-76-4	0.0303 U	0.0303	5.51	1
11031	123478-HxCDD	39227-28-6	0.0235 U	0.0235	5.51	1
11031	123678-HxCDD	57653-85-7	0.0250 U	0.0250	5.51	1
11031	123789-HxCDD	19408-74-3	0.0533 JQ	0.0238	5.51	1
11031	1234678-HpCDD	35822-46-9	0.235 JB	0.0384	5.51	1
11031	OCDD	3268-87-9	0.657 JB	0.0444	11.0	1
11031	2378-TCDF	51207-31-9	0.0306 JBQ	0.0268	1.10	1
11031	12378-PeCDF	57117-41-6	0.0265 JBQ	0.0151	5.51	1
11031	23478-PeCDF	57117-31-4	0.0629 JBQ	0.0160	5.51	1
11031	123478-HxCDF	70648-26-9	0.0335 JBQ	0.0170	5.51	1
11031	123678-HxCDF	57117-44-9	0.0358 JBQ	0.0146	5.51	1
11031	123789-HxCDF	72918-21-9	0.0193 U	0.0193	5.51	1
11031	234678-HxCDF	60851-34-5	0.0404 JB	0.0163	5.51	1
11031	1234678-HpCDF	67562-39-4	0.106 JBQ	0.0161	5.51	1
11031	1234789-HpCDF	55673-89-7	0.0485 JB	0.0261	5.51	1
11031	OCDF	39001-02-0	0.174 JB	0.0480	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-259-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-259-SA5B-SB-4.0-5.0

LLI Sample # SW 6177814
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 15:02

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

Submitted: 01/05/2011 09:00

Reported: 02/07/2011 23:41

DL259 SDG#: DX035-06

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

Sample Description: SL-259-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-259-SA5B-SB-4.0-5.0

LLI Sample # SW 6177814
LLI Group # 1227828
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/04/2011 15:02

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 01/05/2011 09:00

Suite 210

Reported: 02/07/2011 23:41

Chantilly VA 20151

DL259 SDG#: DX035-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11020001	01/30/2011 00:27	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11020001	01/20/2011 10:45	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11012162401A	01/12/2011 18:17	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/07/11 at 11:41 PM

Group Number: 1227828

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

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11012162401A 28a Moisture Content by 160.3	Sample number(s): 6177810-6177814				100		80-120		
Batch number: 11019162401A 28a Moisture Content by 160.3	Sample number(s): 6177809				100		80-120		

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank EDL**</u>	<u>Blank MRL</u>	<u>Report Units</u>	<u>OPR %REC</u>	<u>OPRD %REC</u>	<u>OPR/OPRD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 11020001	Sample number(s): 6177809-6177814								
2378-TCDD	0.0279 U	0.0279	1.00	ng/kg	87		67-158		
12378-PeCDD	0.0513 J	0.0236	5.00	ng/kg	87		70-142		
123478-HxCDD	0.0187 U	0.0187	5.00	ng/kg	86		70-164		
123678-HxCDD	0.0189 U	0.0189	5.00	ng/kg	84		76-134		
123789-HxCDD	0.0176 U	0.0176	5.00	ng/kg	83		64-162		
1234678-HpCDD	0.183 J	0.0270	5.00	ng/kg	85		70-140		
OCDD	0.571 J	0.0211	10.0	ng/kg	84		78-144		
2378-TCDF	0.0348 J	0.0267	1.00	ng/kg	95		75-158		
12378-PeCDF	0.0256 J	0.0123	5.00	ng/kg	86		80-134		
23478-PeCDF	0.0826 J	0.0124	5.00	ng/kg	85		68-160		
123478-HxCDF	0.0256 J	0.0157	5.00	ng/kg	83		72-134		
123678-HxCDF	0.0217 J	0.0122	5.00	ng/kg	84		84-130		
123789-HxCDF	0.0440 J	0.0140	5.00	ng/kg	83		78-130		
234678-HxCDF	0.0379 J	0.0124	5.00	ng/kg	83		70-156		
1234678-HpCDF	0.120 J	0.0103	5.00	ng/kg	82		82-122		
1234789-HpCDF	0.0341 J	0.0145	5.00	ng/kg	83		78-138		
OCDF	0.203 J	0.0272	10.0	ng/kg	84		63-170		

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11012162401A 28a Moisture Content by 160.3	Sample number(s): 6177810-6177814					BKG: P177805 9.2	9.5	3	20
Batch number: 11019162401A 28a Moisture Content by 160.3	Sample number(s): 6177809					BKG: P183549 13.8	13.9	1	20

*- Outside of specification

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 02/07/11 at 11:41 PM

Group Number: 1227828

Surrogate Quality Control

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

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11020001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6177809	68	80	68	75	72	77
6177810	74	82	73	77	77	85
6177811	78	86	78	74	77	83
6177812	71	81	71	71	72	76
6177813	80	90	65	73	78	85
6177814	69	78	67	75	71	69
Blank	81	89	71	87	86	88
OPR	74	82	69	80	74	73
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6177809	86	77	74	81	87	74
6177810	82	89	89	86	88	78
6177811	74	79	59	90	86	81
6177812	75	79	74	84	80	77
6177813	73	86	79	93	89	80
6177814	89	70	64	85	84	79
Blank	96	89	90	99	92	87
OPR	94	76	76	88	88	80
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6177809	78	76	83	83	68	80
6177810	79	79	89	92	79	83
6177811	76	79	78	58	82	86
6177812	74	75	80	76	76	80
6177813	79	82	86	82	85	87
6177814	76	80	84	81	70	84
Blank	89	93	100	103	81	98
OPR	82	84	90	92	73	91
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification

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

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

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

6177809-14

CDM

NOTES:
 *Primary Analyses as indicated on sample labels
 **Secondary Analyses as indicated on sample labels
 @ For hex chromia analysis, lab will measure pH and ORP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers
SL-146-SA5B-SB-4.5	01.04.11	1153	soil	none	5 Encore Samples
SL-146-SA5B-SB-4.0-5.0	01.04.11	1158	soil	none	4 16 oz. Jars
SL-140-SASC-SS-0.0-0.5	01.04.11	0918	soil	none	1 16 oz. Jars & 1 6" sleeve
SL-039-SASC-SS-0.0-0.5	01.04.11	0948	soil	none	1 16 oz. jars & 1 6" sleeve
SL-036-SASC-SS-0.0-0.5	01.04.11	1015	soil	none	1 16 oz. jars & 1 6" sleeve
SL-097-SASC-SS-0.0-0.5	01.04.11	1112	soil	none	1 16 oz. Jars & 1 6" sleeve
SL-259-SA5B-SB-4.0-5.0	01.04.11	1502	soil	none	2 16 oz. jars
SL-259-SA5B-SB-4.5	01.04.11	1458	soil	none	4 Encore Samples
SL-056-SASC-SB-4.0-5.0	01.04.11	1416	soil	none	2 16 oz. jars
SL-056-SASC-SB-9.0-10.0	01.04.11	1605	soil	none	2 16 oz. Jars
SL-056-SASC-SB-9.0-10.0	01.04.11	1412	soil	none	4 Encore Samples
TB-010411	01.04.11	1230	water	HCL	4-40 ml Clear Voa Vials

[illegible]

Other instructions and Notes

Received by: (Signature)

Date/Time	
04.11	1630

Received for Laboratory by: (Signature)

Data/Time

Abstract No.

8695 1431 9906

1-5-11 0906

Laboratory:
Lancaster Laboratories, Inc.

No. of coolers = 1

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

March 18, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 02/05/2011

Group Number: 1231922

SDG: DX047

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
SL-041-SA5C-SB-4.0-5.0 Soil	6199410
SL-159-SA5B-SB-4.0-5.0 Soil	6199411
SL-159-SA5B-SB-8.0-9.0 Soil	6199412
SL-165-SA5B-SB-4.0-5.0 Soil	6199413
SL-272-SA5B-SB-4.0-5.0 Soil	6199414
SL-273-SA5B-SB-2.0-3.0 Soil	6199415

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

ELECTRONIC

COPY TO

1 COPY TO

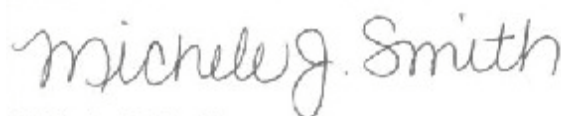
CDM Federal Services Program

Data Package Group

Attn: Todd Burgess

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

Respectfully Submitted,



Michele J. Smith
Senior Specialist



Analysis Report

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Page 1 of 4

Sample Description: SL-041-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-041-SA5C-SB-4.0-5.0

LLI Sample # SW 6199410
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 09:23

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4714 SDG#: DX047-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.3	0.50	0.50	1

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

Sample Description: SL-041-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-041-SA5C-SB-4.0-5.0

LLI Sample # SW 6199410
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 09:23

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4714 SDG#: DX047-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0495 JQ	0.0312	1.14	1
11031	12378-PeCDD	40321-76-4	0.933 JBQ	0.0938	5.70	1
11031	123478-HxCDD	39227-28-6	0.706 J	0.0446	5.70	1
11031	123678-HxCDD	57653-85-7	2.26 J	0.0464	5.70	1
11031	123789-HxCDD	19408-74-3	1.53 J	0.0449	5.70	1
11031	1234678-HpCDD	35822-46-9	6.21 B	0.0327	5.70	1
11031	OCDD	3268-87-9	4.94 JB	0.0269	11.4	1
11031	2378-TCDF	51207-31-9	0.0319 U	0.0319	1.14	1
11031	12378-PeCDF	57117-41-6	0.0784 JB	0.0210	5.70	1
11031	23478-PeCDF	57117-31-4	0.929 JB	0.0201	5.70	1
11031	123478-HxCDF	70648-26-9	4.07 JB	0.0375	5.70	1
11031	123678-HxCDF	57117-44-9	1.00 JB	0.0317	5.70	1
11031	123789-HxCDF	72918-21-9	1.91 JB	0.0357	5.70	1
11031	234678-HxCDF	60851-34-5	0.725 JB	0.0363	5.70	1
11031	1234678-HpCDF	67562-39-4	1.59 JB	0.0174	5.70	1
11031	1234789-HpCDF	55673-89-7	0.819 J	0.0259	5.70	1
11031	OCDF	39001-02-0	0.497 JB	0.0302	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	99	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	85	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-041-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-041-SA5C-SB-4.0-5.0

LLI Sample # SW 6199410
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 09:23

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4714 SDG#: DX047-14

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

Sample Description: SL-041-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-041-SA5C-SB-4.0-5.0

LLI Sample # SW 6199410
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 09:23

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4714 SDG#: DX047-14

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11045001	02/18/2011 05:52	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11045001	02/14/2011 12:10	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11047162401A	02/16/2011 17:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-159-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-159-SA5B-SB-4.0-5.0

LLI Sample # SW 6199411
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 11:35

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4715 SDG#: DX047-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	11.8	0.50	0.50	1

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

Sample Description: SL-159-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-159-SA5B-SB-4.0-5.0

LLI Sample # SW 6199411
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 11:35

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4715 SDG#: DX047-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0288 U	0.0288	1.13	1
11031	12378-PeCDD	40321-76-4	0.0915 JBQ	0.0310	5.67	1
11031	123478-HxCDD	39227-28-6	0.327 JQ	0.0478	5.67	1
11031	123678-HxCDD	57653-85-7	1.10 J	0.0500	5.67	1
11031	123789-HxCDD	19408-74-3	0.674 J	0.0497	5.67	1
11031	1234678-HpCDD	35822-46-9	33.7 B	0.0736	5.67	1
11031	OCDD	3268-87-9	795 B	0.0616	11.3	1
11031	2378-TCDF	51207-31-9	0.0271 U	0.0271	1.13	1
11031	12378-PeCDF	57117-41-6	0.0321 JBQ	0.0113	5.67	1
11031	23478-PeCDF	57117-31-4	0.0648 JBQ	0.0105	5.67	1
11031	123478-HxCDF	70648-26-9	0.0916 JBQ	0.0227	5.67	1
11031	123678-HxCDF	57117-44-9	0.0398 JB	0.0177	5.67	1
11031	123789-HxCDF	72918-21-9	0.0227 U	0.0227	5.67	1
11031	234678-HxCDF	60851-34-5	0.0658 JB	0.0195	5.67	1
11031	1234678-HpCDF	67562-39-4	1.45 JB	0.0158	5.67	1
11031	1234789-HpCDF	55673-89-7	0.119 J	0.0219	5.67	1
11031	OCDF	39001-02-0	5.01 JB	0.0305	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	94	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	96	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	94	24 - 185
13C12-23478-PeCDF	95	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	84	17 - 157
13C12-1278-TCDD (CRS)	90	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-159-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-159-SA5B-SB-4.0-5.0

LLI Sample # SW 6199411
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 11:35

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4715 SDG#: DX047-15

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

Sample Description: SL-159-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-159-SA5B-SB-4.0-5.0

LLI Sample # SW 6199411
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 11:35

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4715 SDG#: DX047-15

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11045001	02/18/2011 06:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11045001	02/14/2011 12:10	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11047162401A	02/16/2011 17:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-159-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-159-SA5B-SB-8.0-9.0

LLI Sample # SW 6199412
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 11:50

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4716 SDG#: DX047-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	18.1	0.50	0.50	1

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

Sample Description: SL-159-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-159-SA5B-SB-8.0-9.0

LLI Sample # SW 6199412
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 11:50

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4716 SDG#: DX047-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0344 U	0.0344	1.22	1
11031	12378-PeCDD	40321-76-4	0.0283 U	0.0283	6.11	1
11031	123478-HxCDD	39227-28-6	0.0234 U	0.0234	6.11	1
11031	123678-HxCDD	57653-85-7	0.0252 U	0.0252	6.11	1
11031	123789-HxCDD	19408-74-3	0.0249 U	0.0249	6.11	1
11031	1234678-HpCDD	35822-46-9	0.253 JB	0.0311	6.11	1
11031	OCDD	3268-87-9	0.927 JB	0.0283	12.2	1
11031	2378-TCDF	51207-31-9	0.0286 U	0.0286	1.22	1
11031	12378-PeCDF	57117-41-6	0.0392 JBQ	0.0122	6.11	1
11031	23478-PeCDF	57117-31-4	0.0523 JBQ	0.0112	6.11	1
11031	123478-HxCDF	70648-26-9	0.0249 JBQ	0.0138	6.11	1
11031	123678-HxCDF	57117-44-9	0.0127 JBQ	0.0107	6.11	1
11031	123789-HxCDF	72918-21-9	0.0284 JBQ	0.0140	6.11	1
11031	234678-HxCDF	60851-34-5	0.0117 U	0.0117	6.11	1
11031	1234678-HpCDF	67562-39-4	0.0251 JB	0.00855	6.11	1
11031	1234789-HpCDF	55673-89-7	0.0225 JQ	0.0137	6.11	1
11031	OCDF	39001-02-0	0.120 JBQ	0.0370	12.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	98	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-159-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-159-SA5B-SB-8.0-9.0

LLI Sample # SW 6199412
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 11:50

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4716 SDG#: DX047-16

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

Sample Description: SL-159-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-159-SA5B-SB-8.0-9.0

LLI Sample # SW 6199412
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 11:50

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4716 SDG#: DX047-16

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11045001	02/18/2011 07:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11045001	02/14/2011 12:10	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11047162401A	02/16/2011 17:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-165-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-165-SA5B-SB-4.0-5.0

LLI Sample # SW 6199413
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 10:04

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4717 SDG#: DX047-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10.7	0.50	0.50	1

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

Sample Description: SL-165-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-165-SA5B-SB-4.0-5.0

LLI Sample # SW 6199413
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 10:04

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4717 SDG#: DX047-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0317 U	0.0317	1.12	1
11031	12378-PeCDD	40321-76-4	0.0702 JBQ	0.0326	5.60	1
11031	123478-HxCDD	39227-28-6	0.0783 J	0.0429	5.60	1
11031	123678-HxCDD	57653-85-7	0.392 J	0.0462	5.60	1
11031	123789-HxCDD	19408-74-3	0.418 J	0.0427	5.60	1
11031	1234678-HpCDD	35822-46-9	5.77 B	0.0487	5.60	1
11031	OCDD	3268-87-9	100 B	0.0337	11.2	1
11031	2378-TCDF	51207-31-9	0.0553 U	0.0553	1.12	1
11031	12378-PeCDF	57117-41-6	0.0820 JBQ	0.0232	5.60	1
11031	23478-PeCDF	57117-31-4	0.0933 JBQ	0.0205	5.60	1
11031	123478-HxCDF	70648-26-9	0.250 JB	0.0269	5.60	1
11031	123678-HxCDF	57117-44-9	0.0615 JBQ	0.0219	5.60	1
11031	123789-HxCDF	72918-21-9	0.265 JB	0.0268	5.60	1
11031	234678-HxCDF	60851-34-5	0.0624 JBQ	0.0225	5.60	1
11031	1234678-HpCDF	67562-39-4	0.473 JB	0.0177	5.60	1
11031	1234789-HpCDF	55673-89-7	0.0693 J	0.0243	5.60	1
11031	OCDF	39001-02-0	1.27 JB	0.0346	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	93	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	99	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	93	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	80	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-165-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-165-SA5B-SB-4.0-5.0

LLI Sample # SW 6199413
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 10:04

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4717 SDG#: DX047-17

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

Sample Description: SL-165-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-165-SA5B-SB-4.0-5.0

LLI Sample # SW 6199413
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 10:04

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4717 SDG#: DX047-17

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11045001	02/18/2011 08:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11045001	02/14/2011 12:10	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11047162401A	02/16/2011 17:18	Scott W Freisher	1



Analysis Report

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Sample Description: SL-272-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-272-SA5B-SB-4.0-5.0

LLI Sample # SW 6199414
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 15:10

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4718 SDG#: DX047-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	10	0.50	0.50	1

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

Sample Description: SL-272-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-272-SA5B-SB-4.0-5.0

LLI Sample # SW 6199414
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 15:10

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4718 SDG#: DX047-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0294 U	0.0294	1.11	1
11031	12378-PeCDD	40321-76-4	0.0234 U	0.0234	5.56	1
11031	123478-HxCDD	39227-28-6	0.0219 U	0.0219	5.56	1
11031	123678-HxCDD	57653-85-7	0.0513 JQ	0.0224	5.56	1
11031	123789-HxCDD	19408-74-3	0.0654 JQ	0.0211	5.56	1
11031	1234678-HpCDD	35822-46-9	1.30 JB	0.0361	5.56	1
11031	OCDD	3268-87-9	28.9 B	0.0318	11.1	1
11031	2378-TCDF	51207-31-9	0.0294 U	0.0294	1.11	1
11031	12378-PeCDF	57117-41-6	0.0249 JBQ	0.0123	5.56	1
11031	23478-PeCDF	57117-31-4	0.0450 JBQ	0.0114	5.56	1
11031	123478-HxCDF	70648-26-9	0.0170 JBQ	0.0133	5.56	1
11031	123678-HxCDF	57117-44-9	0.0157 JBQ	0.00989	5.56	1
11031	123789-HxCDF	72918-21-9	0.0384 JBQ	0.0133	5.56	1
11031	234678-HxCDF	60851-34-5	0.0151 JBQ	0.0103	5.56	1
11031	1234678-HpCDF	67562-39-4	0.0929 JB	0.0139	5.56	1
11031	1234789-HpCDF	55673-89-7	0.0280 JQ	0.0221	5.56	1
11031	OCDF	39001-02-0	0.303 JBQ	0.0432	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	102	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	99	24 - 185
13C12-23478-PeCDF	99	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	96	35 - 197

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-272-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-272-SA5B-SB-4.0-5.0

LLI Sample # SW 6199414
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 15:10

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4718 SDG#: DX047-18

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

Sample Description: SL-272-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-272-SA5B-SB-4.0-5.0

LLI Sample # SW 6199414
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 15:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 02/05/2011 11:00

Suite 210

Reported: 03/18/2011 08:59

Chantilly VA 20151

X4718 SDG#: DX047-18

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11045001	02/18/2011 09:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11045001	02/14/2011 12:10	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11047162401A	02/16/2011 17:18	Scott W Freisher	1



Analysis Report

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Page 1 of 4

Sample Description: SL-273-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-273-SA5B-SB-2.0-3.0

LLI Sample # SW 6199415
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 13:57

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4719 SDG#: DX047-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry						
11625	28a Moisture Content by 160.3	n.a.	12.0	0.50	0.50	1

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

Sample Description: SL-273-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-273-SA5B-SB-2.0-3.0

LLI Sample # SW 6199415
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 13:57

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4719 SDG#: DX047-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans		EPA 1613B	ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.97	0.122	1.14	1
11031	12378-PeCDD	40321-76-4	4.57	0.223	5.68	1
			JB			
11031	123478-HxCDD	39227-28-6	12.6	0.223	5.68	1
11031	123678-HxCDD	57653-85-7	52.4	0.240	5.68	1
11031	123789-HxCDD	19408-74-3	22.9	0.223	5.68	1
11031	1234678-HpCDD	35822-46-9	1,440	0.314	5.68	1
			B			
11031	OCDD	3268-87-9	15,000	0.166	11.4	1
			EB			
11031	2378-TCDF	51207-31-9	2.94	0.376	1.14	1
			Q			
11650	2378-TCDF-Conf	51207-31-9	3.93	0.0890	1.14	1
			B			
11031	12378-PeCDF	57117-41-6	7.16	0.0870	5.68	1
			B			
11031	23478-PeCDF	57117-31-4	4.19	0.0865	5.68	1
			JB			
11031	123478-HxCDF	70648-26-9	11.8	0.155	5.68	1
			B			
11031	123678-HxCDF	57117-44-9	9.15	0.132	5.68	1
			B			
11031	123789-HxCDF	72918-21-9	1.86	0.166	5.68	1
			JB			
11031	234678-HxCDF	60851-34-5	14.2	0.147	5.68	1
			B			
11031	1234678-HpCDF	67562-39-4	172	0.0997	5.68	1
			B			
11031	1234789-HpCDF	55673-89-7	21.8	0.151	5.68	1
11031	OCDF	39001-02-0	398	0.0678	11.4	1
			B			

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-2378-TCDF-Conf	76	24 - 169
13C12-12378-PeCDD	94	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	93	23 - 140
13C12-OCDD	105	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	95	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	99	28 - 143

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

Sample Description: SL-273-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-273-SA5B-SB-2.0-3.0

LLI Sample # SW 6199415
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 13:57

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

Submitted: 02/05/2011 11:00

Reported: 03/18/2011 08:59

X4719 SDG#: DX047-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds						
		%Rec	Windows			
	13C12-1234789-HpCDF	78	26 - 138			
	13C12-0CDF	85	17 - 157			
	13C12-1278-TCDD (CRS)	91	35 - 197			

Dioxins/Furans Data Qualifiers:

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

Sample Description: SL-273-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-273-SA5B-SB-2.0-3.0

LLI Sample # SW 6199415
LLI Group # 1231922
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 02/04/2011 13:57

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 02/05/2011 11:00

Suite 210

Reported: 03/18/2011 08:59

Chantilly VA 20151

X4719 SDG#: DX047-19*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11045001	02/18/2011 10:35	Nelson H Risser	1
11650	Dioxins/Furans in Solids- Conf	EPA 1613B	1	11045001	03/15/2011 19:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11045001	02/14/2011 12:10	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11047162401A	02/16/2011 17:18	Scott W Freisher	1

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/18/11 at 08:59 AM

Group Number: 1231922

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11047162401A 28a Moisture Content by 160.3	Sample number(s): 6199410-6199415				100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11045001	Sample number(s): 6199410-6199415								
2378-TCDD	0.0352 U	0.0352	1.00	ng/kg	93		67-158		
12378-PeCDD	0.0347 J	0.0336	5.00	ng/kg	93		70-142		
123478-HxCDD	0.0225 U	0.0225	5.00	ng/kg	96		70-164		
123678-HxCDD	0.0239 U	0.0239	5.00	ng/kg	95		76-134		
123789-HxCDD	0.0229 U	0.0229	5.00	ng/kg	94		64-162		
1234678-HpCDD	0.144 J	0.0361	5.00	ng/kg	94		70-140		
OCDD	0.305 J	0.0254	10.0	ng/kg	93		78-144		
2378-TCDF	0.0349 U	0.0349	1.00	ng/kg	102		75-158		
2378-TCDF-Conf	0.0433 J	0.0179	1.00	ng/kg					
12378-PeCDF	0.0309 J	0.0150	5.00	ng/kg	96		80-134		
23478-PeCDF	0.0462 J	0.0163	5.00	ng/kg	93		68-160		
123478-HxCDF	0.0356 J	0.0197	5.00	ng/kg	94		72-134		
123678-HxCDF	0.0220 J	0.0138	5.00	ng/kg	92		84-130		
123789-HxCDF	0.0277 J	0.0199	5.00	ng/kg	94		78-130		
234678-HxCDF	0.0300 J	0.0156	5.00	ng/kg	94		70-156		
1234678-HpCDF	0.0350 J	0.0106	5.00	ng/kg	95		82-122		
1234789-HpCDF	0.0167 U	0.0167	5.00	ng/kg	93		78-138		
OCDF	0.227 J	0.0489	10.0	ng/kg	93		63-170		

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11047162401A 28a Moisture Content by 160.3	Sample number(s): 6199410-6199415					BKG: P199404 11.8	11.8	0	20

Surrogate Quality Control

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

*- Outside of specification

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

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

Quality Control Summary

Client Name: CDM Federal Programs Corp.
Reported: 03/18/11 at 08:59 AM

Group Number: 1231922

Surrogate Quality Control

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11045001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6199410	72	85	71	81	73	80
6199411	76	95	68	83	78	76
6199412	66	90	61	78	72	68
6199413	68	93	66	79	77	74
6199414	73	99	61	78	76	67
6199415	74	95	74	84	77	77
Blank	64	75	57	74	68	61
OPR	63	77	67	77	70	68

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

6199410	90	73	85	85	83	79
6199411	86	75	84	90	94	81
6199412	101	77	75	83	84	75
6199413	93	80	80	87	93	80
6199414	93	68	64	96	102	77
6199415	99	78	85	91	94	82
Blank	80	61	58	82	80	71
OPR	75	66	72	86	78	69

Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF

6199410	79	81	85	99	72	86
6199411	80	82	88	96	72	94
6199412	75	72	92	98	66	88
6199413	78	80	88	99	67	88
6199414	78	81	85	88	71	99
6199415	80	82	93	105	75	95
Blank	72	73	76	84	63	86
OPR	69	65	76	85	64	82

Limits:	28-130	28-130	23-140	17-157	24-169	24-185
	13C12-2378-TCDF-Conf					

6199410	
6199411	
6199412	
6199413	
6199414	
6199415	76
Blank	66
OPR	

Limits: 24-169

*- Outside of specification

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

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

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

CHAIN OF CUSTODY RECORD

SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS				VOCs		SECONDARY FOR ALL LOCATIONS															
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels @ For hex chrome analysis, lab will measure pH and ORP \$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected Signatures:						*Metals EPA 8010/8202/8208/7474A	*Fluoride EPA 300.0	SVOCS EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199*	Perchlorate Confirmation by EPA 8650 (10%)	VOCs/EPA 8260B \$	1,4-Dioxane EPA 8260SIM \$	TPH-GRO EPA 8015B \$	**PH EPA 8045C	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**H. NDMA EPA 1635C	**Energetics EPA 8330A	**Cyanide EPA 8012B	**Terphenyls EPA 8016B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																						
SL-041-SA5C-SB-4.0-5.0	2.04.2011	0923	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X															
SL-041-SA5C-SB-4.5	2.04.2011	0918	SOIL	NONE	4-Encores								X	X													
SL-159-SA5B-SB-4.0-5.0	2.04.2011	1135	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X															
SL-159-SA5B-SB-4.5	2.04.2011	1133	SOIL	NONE	4-Encores								X	X													
SL-159-SA5B-SB-8.0-9.0	2.04.2011	1150	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X															
SL-159-SA5B-SB-8.6	2.04.2011	1146	SOIL	NONE	4-Encores								X	X													
SL-165-SA5B-SB-4.0-5.0	2.04.2011	1004	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X															
SL-165-SA5B-SB-4.5	2.04.2011	1002	SOIL	NONE	4-Encores								X	X													
SL-272-SA5B-SB-4.0-5.0	2.04.2011	1510	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X															
SL-272-SA5B-SB-4.5	2.04.2011	1500	SOIL	NONE	4-Encores								X	X													
SL-273-SA5B-SB-2.0-3.0	2.04.2011	1357	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X															
SL-273-SA5B-SB-2.5	2.04.2011	1355	SOIL	NONE	4-Encores								X	X													
TB-020411	2.04.2011		WATER	HCl	3-40 mL VOA VIALS								X	X													
Relinquished by: (Signature)		Date/Time 02/04/2011 / 17:00		Received for Laboratory by: (Signature)																				TRIP BLANK			
Received by: (Signature)		Date/Time		Airbill No.(s) B695 1432 1229																				Laboratory: Lancaster Laboratories, Inc.			
																								No. of coolers = 1			

Nicole Maljovec

From: Crites, Ann Marie [CritesAM@cdm.com]
Sent: Monday, February 07, 2011 3:30 PM
To: Bloisa, Peggy; Burgess, Todd; Laura Rainey; Nicole Maljovec; SA Env Entry; Samaritoni, Shelley; Zakowski, Cherie
Subject: Revised COC for 2/4/11
Attachments: COC_subsurface_samples_02_04_11REVISED.xls

The sample location issue has been resolved. My apologies for any inconvenience.

Ann Marie Crites|Environmental Scientist

CDM | 60 Port Blvd, Ste 201

Libby, Montana 59923

critesam@cdm.com | Cell: 406-422-8139

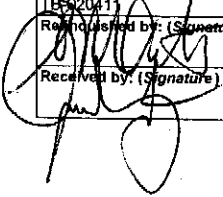
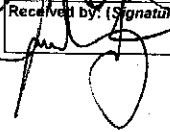
Please consider the environment before printing this e-mail.

2/7/2011

acc# 13013 Cp# 1331922

Sample# 6199410-15

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING						PRIMARY FOR ALL LOCATIONS										VOCs		SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 8010/8208/8747/1 A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCB/PCP's EPA 8082	*Dioxin/Furan EPA 1613B	*Pesticide EPA 314.0	*Hex Chrome EPA 7198*	*Residuals Confirmation by EPA 8850 (10%)	*VOCs EPA 8260B \$	*1,4-Dioxane EPA 8260SIM \$	*TPH-GRO EPA 8015B \$	*TPH EPA 9045C	*TPH-EFH EPA 8015B Mod.	*Nitrates EPA 300.0	*Formaldehyde EPA 8315A	*Th-NMA EPA 1625C	*Energetics EPA 8330A	*Cyanide EPA 9012B	*Terphenyls EPA 8015B	*Glycols EPA 8015B	*Alcohols EPA 8015B		
SL-041-SA5B-SB-4.0-5.0	2.04.2011	0923	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X																
SL-041-SA5B-SB-4.5	2.04.2011	0918	SOIL	NONE	4-Encores										X	X												
SL-159-SA5B-SB-4.0-5.0	2.04.2011	1135	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X																
SL-159-SA5B-SB-4.5	2.04.2011	1133	SOIL	NONE	4-Encores										X	X												
SL-159-SA5B-SB-8.0-9.0	2.04.2011	1150	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X																
SL-159-SA5B-SB-8.5	2.04.2011	1146	SOIL	NONE	4-Encores										X	X												
SL-165-SA5B-SB-4.0-5.0	2.04.2011	1004	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X																
SL-165-SA5B-SB-4.5	2.04.2011	1002	SOIL	NONE	4-Encores										X	X												
SL-272-SA5B-SB-4.0-5.0	2.04.2011	1510	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X																
SL-272-SA5B-SB-4.5	2.04.2011	1500	SOIL	NONE	4-Encores										X	X												
SL-273-SA5B-SB-2.0-3.0	2.04.2011	1357	SOIL	NONE	2-16 oz. jars	X	X	X	X	X	X	X																
SL-273-SA5B-SB-2.5	2.04.2011	1355	SOIL	NONE	4-Encores										X	X												
TPH-2041	2.04.2011		WATER	HCl	3-40 mL VOA VIALS										X	X												
Received by: (Signature) 						Received for Laboratory by: (Signature)						TRIP BLANK										Laboratory: Lancaster Laboratories, Inc.						
Date/Time 02/04/2011 / 17:00																												
Received by: (Signature) 						Airbill No.(s) 8695 1432 1229																						
																						No. of coolers = 1						

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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