

**Sample Description:** SL-057-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA5C-SB-4.0-5.0

LLI Sample # SW 6152669  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 09:33 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D5745 SDG#: DX011-08

## 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      | 10340002     | 12/16/2010 11:01       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10340002     | 12/06/2010 13:00       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10343162401A | 12/09/2010 08:36       | William C Schwebel | 1               |



# 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-057-SA5C-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA5C-SB-7.0-8.0

LLI Sample # SW 6152670  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 09:37 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D5778 SDG#: DX011-09

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 7.5        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-057-SA5C-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA5C-SB-7.0-8.0

**LLI Sample #** SW 6152670  
**LLI Group #** 1223255  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 11/30/2010 09:37 by PH

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

**Submitted:** 12/01/2010 09:20

**Reported:** 01/28/2011 16:51

D5778 SDG#: DX011-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.00703 U    | 0.00703      | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0251 JBQ   | 0.0110       | 5.41         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0500 JBQ   | 0.0130       | 5.41         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.164 JB     | 0.0132       | 5.41         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.132 JB     | 0.0135       | 5.41         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 7.09 B       | 0.0141       | 5.41         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 41.3 B       | 0.0135       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0135 JB    | 0.00703      | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0279 JBQ   | 0.00627      | 5.41         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0922 JB    | 0.00584      | 5.41         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.108 JB     | 0.00984      | 5.41         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0839 JBQ   | 0.00930      | 5.41         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0487 JBQ   | 0.0102       | 5.41         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.141 JB     | 0.00951      | 5.41         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.611 JB     | 0.00649      | 5.41         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0725 JB    | 0.00789      | 5.41         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.454 JB     | 0.00897      | 10.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 72   | 25 - 164 |
| 13C12-12378-PeCDD     | 80   | 25 - 181 |
| 13C12-123478-HxCDD    | 74   | 32 - 141 |
| 13C12-123678-HxCDD    | 69   | 28 - 130 |
| 13C12-123789-HxCDD    | 71   | 28 - 130 |
| 13C12-1234678-HpCDD   | 74   | 23 - 140 |
| 13C12-OCDD            | 67   | 17 - 157 |
| 13C12-2378-TCDF       | 71   | 24 - 169 |
| 13C12-12378-PeCDF     | 77   | 24 - 185 |
| 13C12-23478-PeCDF     | 77   | 21 - 178 |
| 13C12-123478-HxCDF    | 68   | 26 - 152 |
| 13C12-123678-HxCDF    | 68   | 26 - 123 |
| 13C12-234678-HxCDF    | 69   | 28 - 136 |
| 13C12-123789-HxCDF    | 73   | 29 - 147 |
| 13C12-1234678-HpCDF   | 71   | 28 - 143 |
| 13C12-1234789-HpCDF   | 67   | 26 - 138 |
| 13C12-OCDF            | 59   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 82   | 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

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

Page 3 of 4

**Sample Description:** SL-057-SA5C-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA5C-SB-7.0-8.0

LLI Sample # SW 6152670  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 09:37 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D5778 SDG#: DX011-09

| 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-057-SA5C-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA5C-SB-7.0-8.0

LLI Sample # SW 6152670  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D5778 SDG#: DX011-09

## 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      | 10340002     | 12/16/2010 11:58       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10340002     | 12/06/2010 13:00       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10343162401A | 12/09/2010 08:36       | William C Schwebel | 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-074-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA5C-SB-4.0-5.0

LLI Sample # SW 6152671  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 11:08 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D7445 SDG#: DX011-10

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-074-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA5C-SB-4.0-5.0

LLI Sample # SW 6152671  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 11:08 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D7445 SDG#: DX011-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.00907 U    | 0.00907      | 1.19         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0688 JBQ   | 0.0134       | 5.97         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0227 JBQ   | 0.0107       | 5.97         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.192 JBQ    | 0.0110       | 5.97         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.293 JB     | 0.0106       | 5.97         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.209 JB     | 0.0111       | 5.97         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.455 JB     | 0.0134       | 11.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.00907 U    | 0.00907      | 1.19         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0853 JBQ   | 0.00788      | 5.97         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0782 JB    | 0.00716      | 5.97         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0705 JB    | 0.0111       | 5.97         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0731 JBQ   | 0.0105       | 5.97         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.441 JB     | 0.0117       | 5.97         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.130 JBQ    | 0.0110       | 5.97         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.428 JB     | 0.00692      | 5.97         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0489 JB    | 0.00931      | 5.97         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.253 JB     | 0.0119       | 11.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 70   | 25 - 164 |
| 13C12-12378-PeCDD     | 80   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 69   | 28 - 130 |
| 13C12-123789-HxCDD    | 71   | 28 - 130 |
| 13C12-1234678-HpCDD   | 74   | 23 - 140 |
| 13C12-OCDD            | 66   | 17 - 157 |
| 13C12-2378-TCDF       | 70   | 24 - 169 |
| 13C12-12378-PeCDF     | 77   | 24 - 185 |
| 13C12-23478-PeCDF     | 78   | 21 - 178 |
| 13C12-123478-HxCDF    | 69   | 26 - 152 |
| 13C12-123678-HxCDF    | 69   | 26 - 123 |
| 13C12-234678-HxCDF    | 69   | 28 - 136 |
| 13C12-123789-HxCDF    | 70   | 29 - 147 |
| 13C12-1234678-HpCDF   | 74   | 28 - 143 |
| 13C12-1234789-HpCDF   | 63   | 26 - 138 |
| 13C12-OCDF            | 54   | 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-074-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA5C-SB-4.0-5.0

LLI Sample # SW 6152671  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 11:08 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D7445 SDG#: DX011-10

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

**Sample Description:** SL-074-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6152671  
**LLI Group #** 1223255  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 11/30/2010 11:08 by PH

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

**Submitted:** 12/01/2010 09:20

**Reported:** 01/28/2011 16:51

D7445 SDG#: DX011-10

## 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      | 10340002     | 12/16/2010 12:55       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10340002     | 12/06/2010 13:00       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10343162401A | 12/09/2010 08:36       | William C Schwebel | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-074-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA5C-SB-8.0-9.0

LLI Sample # SW 6152672  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 11:11 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D7489 SDG#: DX011-11

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-074-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA5C-SB-8.0-9.0

**LLI Sample #** SW 6152672  
**LLI Group #** 1223255  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 11/30/2010 11:11 by PH

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

**Submitted:** 12/01/2010 09:20

**Reported:** 01/28/2011 16:51

D7489 SDG#: DX011-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0135 U     | 0.0135       | 1.13         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0249 JBQ   | 0.0173       | 5.67         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0167 JB    | 0.0143       | 5.67         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0251 JBQ   | 0.0141       | 5.67         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0395 JBQ   | 0.0144       | 5.67         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.232 JB     | 0.0175       | 5.67         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.718 JB     | 0.0266       | 11.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0109 U     | 0.0109       | 1.13         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0396 JBQ   | 0.0105       | 5.67         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0680 JBQ   | 0.0102       | 5.67         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.110 JBQ    | 0.0151       | 5.67         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0846 JB    | 0.0147       | 5.67         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0790 JBQ   | 0.0167       | 5.67         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.134 JB     | 0.0152       | 5.67         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.542 JB     | 0.0112       | 5.67         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0804 JBQ   | 0.0142       | 5.67         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.307 JB     | 0.0237       | 11.3         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 76   | 25 - 164 |
| 13C12-12378-PeCDD     | 83   | 25 - 181 |
| 13C12-123478-HxCDD    | 77   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 76   | 28 - 130 |
| 13C12-1234678-HpCDD   | 76   | 23 - 140 |
| 13C12-OCDD            | 65   | 17 - 157 |
| 13C12-2378-TCDF       | 76   | 24 - 169 |
| 13C12-12378-PeCDF     | 81   | 24 - 185 |
| 13C12-23478-PeCDF     | 81   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 72   | 26 - 123 |
| 13C12-234678-HxCDF    | 73   | 28 - 136 |
| 13C12-123789-HxCDF    | 74   | 29 - 147 |
| 13C12-1234678-HpCDF   | 75   | 28 - 143 |
| 13C12-1234789-HpCDF   | 68   | 26 - 138 |
| 13C12-OCDF            | 57   | 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-074-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA5C-SB-8.0-9.0

LLI Sample # SW 6152672  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 11:11 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D7489 SDG#: DX011-11

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



# 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-074-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA5C-SB-8.0-9.0

LLI Sample # SW 6152672  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 11:11 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D7489 SDG#: DX011-11

## 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      | 10340002     | 12/16/2010 17:51       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10340002     | 12/06/2010 13:00       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10343162401A | 12/09/2010 08:36       | William C Schwebel | 1               |

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



# Analysis Report

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

Page 1 of 4

**Sample Description:** SL-070-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5C-SB-4.0-5.0

LLI Sample # SW 6152673  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 13:34 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D7045 SDG#: DX011-12

| CAT<br>No.           | Analysis Name                 | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|-------------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                               |            |               |                                   |                                 |                    |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 11.7          | 0.50                              | 0.50                            | 1                  |

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

**Sample Description:** SL-070-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6152673  
**LLI Group #** 1223255  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 11/30/2010 13:34 by PH

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

**Submitted:** 12/01/2010 09:20

**Reported:** 01/28/2011 16:51

D7045 SDG#: DX011-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0473 JBQ   | 0.0169       | 1.13         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0617 JBQ   | 0.0187       | 5.66         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0277 JBQ   | 0.0177       | 5.66         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.750 JB     | 0.0179       | 5.66         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.54 JB      | 0.0186       | 5.66         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.43 JB      | 0.0225       | 5.66         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 19.4 B       | 0.0255       | 11.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0300 JB    | 0.0211       | 1.13         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0818 JBQ   | 0.0146       | 5.66         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.198 JBQ    | 0.0133       | 5.66         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0860 JBQ   | 0.0185       | 5.66         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.370 JB     | 0.0185       | 5.66         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.140 JB     | 0.0215       | 5.66         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.162 JB     | 0.0190       | 5.66         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.692 JB     | 0.0101       | 5.66         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0710 JB    | 0.0129       | 5.66         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.53 JB      | 0.0178       | 11.3         | 1               |

| <b>Labeled Compounds</b> | <b>%Rec</b> | <b>Windows</b> |
|--------------------------|-------------|----------------|
| 13C12-2378-TCDD          | 64          | 25 - 164       |
| 13C12-12378-PeCDD        | 83          | 25 - 181       |
| 13C12-123478-HxCDD       | 75          | 32 - 141       |
| 13C12-123678-HxCDD       | 72          | 28 - 130       |
| 13C12-123789-HxCDD       | 70          | 28 - 130       |
| 13C12-1234678-HpCDD      | 72          | 23 - 140       |
| 13C12-OCDD               | 61          | 17 - 157       |
| 13C12-2378-TCDF          | 68          | 24 - 169       |
| 13C12-12378-PeCDF        | 79          | 24 - 185       |
| 13C12-23478-PeCDF        | 80          | 21 - 178       |
| 13C12-123478-HxCDF       | 72          | 26 - 152       |
| 13C12-123678-HxCDF       | 69          | 26 - 123       |
| 13C12-234678-HxCDF       | 69          | 28 - 136       |
| 13C12-123789-HxCDF       | 68          | 29 - 147       |
| 13C12-1234678-HpCDF      | 75          | 28 - 143       |
| 13C12-1234789-HpCDF      | 65          | 26 - 138       |
| 13C12-OCDF               | 55          | 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-070-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5C-SB-4.0-5.0

LLI Sample # SW 6152673  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 13:34 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D7045 SDG#: DX011-12

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



# Analysis Report

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**Sample Description:** SL-070-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6152673  
**LLI Group #** 1223255  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 11/30/2010 13:34 by PH

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

**Submitted:** 12/01/2010 09:20

**Reported:** 01/28/2011 16:51

D7045 SDG#: DX011-12

## 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      | 10340002     | 12/16/2010 18:47       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10340002     | 12/06/2010 13:00       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10343162401A | 12/09/2010 08:36       | William C Schwebel | 1               |

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



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-070-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5C-SB-9.0-10.0

LLI Sample # SW 6152674  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 13:40 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D7089 SDG#: DX011-13

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-070-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6152674  
**LLI Group #** 1223255  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 11/30/2010 13:40 by PH

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

**Submitted:** 12/01/2010 09:20

**Reported:** 01/28/2011 16:51

D7089 SDG#: DX011-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0340 JBQ   | 0.0156       | 1.15         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0614 JBQ   | 0.0210       | 5.77         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0348 JBQ   | 0.0145       | 5.77         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0446 JBQ   | 0.0152       | 5.77         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0612 JBQ   | 0.0150       | 5.77         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.241 JBQ    | 0.0176       | 5.77         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.461 JB     | 0.0264       | 11.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0209 JBQ   | 0.0155       | 1.15         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.101 JB     | 0.0133       | 5.77         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.150 JBQ    | 0.0118       | 5.77         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.137 JBQ    | 0.0167       | 5.77         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0927 JB    | 0.0163       | 5.77         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0986 JB    | 0.0192       | 5.77         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.170 JBQ    | 0.0171       | 5.77         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.633 JBQ    | 0.0126       | 5.77         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0934 JB    | 0.0159       | 5.77         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.299 JB     | 0.0200       | 11.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 52   | 25 - 164 |
| 13C12-12378-PeCDD     | 66   | 25 - 181 |
| 13C12-123478-HxCDD    | 66   | 32 - 141 |
| 13C12-123678-HxCDD    | 61   | 28 - 130 |
| 13C12-123789-HxCDD    | 62   | 28 - 130 |
| 13C12-1234678-HpCDD   | 64   | 23 - 140 |
| 13C12-OCDD            | 55   | 17 - 157 |
| 13C12-2378-TCDF       | 53   | 24 - 169 |
| 13C12-12378-PeCDF     | 62   | 24 - 185 |
| 13C12-23478-PeCDF     | 64   | 21 - 178 |
| 13C12-123478-HxCDF    | 63   | 26 - 152 |
| 13C12-123678-HxCDF    | 62   | 26 - 123 |
| 13C12-234678-HxCDF    | 60   | 28 - 136 |
| 13C12-123789-HxCDF    | 59   | 29 - 147 |
| 13C12-1234678-HpCDF   | 64   | 28 - 143 |
| 13C12-1234789-HpCDF   | 58   | 26 - 138 |
| 13C12-OCDF            | 50   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 60   | 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-070-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5C-SB-9.0-10.0

LLI Sample # SW 6152674  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 13:40 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D7089 SDG#: DX011-13

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

**Sample Description:** SL-070-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6152674  
**LLI Group #** 1223255  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 11/30/2010 13:40 by PH

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

**Submitted:** 12/01/2010 09:20

**Reported:** 01/28/2011 16:51

D7089 SDG#: DX011-13

## 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      | 10340002     | 12/16/2010 19:44       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10340002     | 12/06/2010 13:00       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10343162401A | 12/09/2010 08:36       | William C Schwebel | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-043-SA5C-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA5C-SB-2.0-3.0

LLI Sample # SW 6152675  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 15:06 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D4323 SDG#: DX011-14

| CAT No.       | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | EPA 160.3 modified            |            | %          | %                           | %                         |                 |
| 11625         | 28a Moisture Content by 160.3 | n.a.       | 9.3        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-043-SA5C-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA5C-SB-2.0-3.0

LLI Sample # SW 6152675  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 15:06 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D4323 SDG#: DX011-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0297 JBQ   | 0.0148       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0398 JB    | 0.0194       | 5.51         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0160 U     | 0.0160       | 5.51         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0562 JBQ   | 0.0165       | 5.51         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0653 JBQ   | 0.0164       | 5.51         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.245 JB     | 0.0163       | 5.51         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.328 JBQ    | 0.0162       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0167 JBQ   | 0.0126       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0623 JB    | 0.0101       | 5.51         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.109 JB     | 0.00937      | 5.51         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.116 JB     | 0.0148       | 5.51         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0894 JBQ   | 0.0139       | 5.51         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.135 JB     | 0.0161       | 5.51         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.142 JB     | 0.0142       | 5.51         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.532 JB     | 0.00673      | 5.51         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0691 JB    | 0.00915      | 5.51         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.301 JB     | 0.0139       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 58   | 25 - 164 |
| 13C12-12378-PeCDD     | 77   | 25 - 181 |
| 13C12-123478-HxCDD    | 78   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 73   | 28 - 130 |
| 13C12-1234678-HpCDD   | 75   | 23 - 140 |
| 13C12-OCDD            | 66   | 17 - 157 |
| 13C12-2378-TCDF       | 56   | 24 - 169 |
| 13C12-12378-PeCDF     | 72   | 24 - 185 |
| 13C12-23478-PeCDF     | 73   | 21 - 178 |
| 13C12-123478-HxCDF    | 70   | 26 - 152 |
| 13C12-123678-HxCDF    | 71   | 26 - 123 |
| 13C12-234678-HxCDF    | 71   | 28 - 136 |
| 13C12-123789-HxCDF    | 69   | 29 - 147 |
| 13C12-1234678-HpCDF   | 77   | 28 - 143 |
| 13C12-1234789-HpCDF   | 66   | 26 - 138 |
| 13C12-OCDF            | 57   | 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

**Sample Description:** SL-043-SA5C-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA5C-SB-2.0-3.0

LLI Sample # SW 6152675  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 15:06 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D4323 SDG#: DX011-14

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

**Sample Description:** SL-043-SA5C-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA5C-SB-2.0-3.0

LLI Sample # SW 6152675  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 15:06 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

D4323 SDG#: DX011-14

## 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      | 10340002     | 12/17/2010 12:56       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10340002     | 12/06/2010 13:00       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 2      | 10344162401A | 12/10/2010 11:47       | William C Schwebel | 1               |

**Sample Description:** EB11-SA5C-113010 Water  
SSFL Area IV Collocated Soil Sampling  
EB11-SA5C-113010

LLI Sample # WW 6152676  
LLI Group # 1223255  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 11/30/2010 14:10 by PH

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

Submitted: 12/01/2010 09:20

Reported: 01/28/2011 16:51

DEB11 SDG#: DX011-15EB\*

| CAT No.               | Analysis Name | CAS Number       | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|-----------------------|---------------|------------------|--------------------|------------------|-----------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>pg/l</b>        | <b>pg/l</b>      | <b>pg/l</b>     |                 |
| 10915                 | 2378-TCDD     | 1746-01-6        | 0.428 JQ           | 0.342            | 1.99            | 1               |
| 10915                 | 12378-PeCDD   | 40321-76-4       | 0.392 JBQ          | 0.323            | 9.94            | 1               |
| 10915                 | 123478-HxCDD  | 39227-28-6       | 0.373 JB           | 0.230            | 9.94            | 1               |
| 10915                 | 123678-HxCDD  | 57653-85-7       | 0.565 JBQ          | 0.234            | 9.94            | 1               |
| 10915                 | 123789-HxCDD  | 19408-74-3       | 0.239 U            | 0.239            | 9.94            | 1               |
| 10915                 | 1234678-HpCDD | 35822-46-9       | 1.71 JB            | 0.293            | 9.94            | 1               |
| 10915                 | OCDD          | 3268-87-9        | 4.11 JB            | 0.394            | 19.9            | 1               |
| 10915                 | 2378-TCDF     | 51207-31-9       | 0.440 JBQ          | 0.200            | 1.99            | 1               |
| 10915                 | 12378-PeCDF   | 57117-41-6       | 0.668 JBQ          | 0.199            | 9.94            | 1               |
| 10915                 | 23478-PeCDF   | 57117-31-4       | 0.989 JB           | 0.175            | 9.94            | 1               |
| 10915                 | 123478-HxCDF  | 70648-26-9       | 1.01 JBQ           | 0.191            | 9.94            | 1               |
| 10915                 | 123678-HxCDF  | 57117-44-9       | 0.599 JBQ          | 0.186            | 9.94            | 1               |
| 10915                 | 123789-HxCDF  | 72918-21-9       | 1.05 JB            | 0.212            | 9.94            | 1               |
| 10915                 | 234678-HxCDF  | 60851-34-5       | 0.748 JB           | 0.186            | 9.94            | 1               |
| 10915                 | 1234678-HpCDF | 67562-39-4       | 4.23 JB            | 0.154            | 9.94            | 1               |
| 10915                 | 1234789-HpCDF | 55673-89-7       | 0.603 JB           | 0.190            | 9.94            | 1               |
| 10915                 | OCDF          | 39001-02-0       | 2.44 JB            | 0.357            | 19.9            | 1               |

The method blank and OPR associated with this sample had recoveries of some labeled compounds that were outside method limits. The sample was re-extracted outside the client specified holding time on an extraction batch with compliant recoveries in the method blank and OPR. Comparable sample results were observed between the two extractions.

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 28   | 25 - 164 |
| 13C12-12378-PeCDD     | 39   | 25 - 181 |
| 13C12-123478-HxCDD    | 38   | 32 - 141 |
| 13C12-123678-HxCDD    | 36   | 28 - 130 |
| 13C12-123789-HxCDD    | 37   | 28 - 130 |
| 13C12-1234678-HpCDD   | 35   | 23 - 140 |
| 13C12-OCDD            | 28   | 17 - 157 |
| 13C12-2378-TCDF       | 41   | 24 - 169 |
| 13C12-12378-PeCDF     | 41   | 24 - 185 |
| 13C12-23478-PeCDF     | 42   | 21 - 178 |
| 13C12-123478-HxCDF    | 38   | 26 - 152 |
| 13C12-123678-HxCDF    | 38   | 26 - 123 |
| 13C12-234678-HxCDF    | 40   | 28 - 136 |
| 13C12-123789-HxCDF    | 39   | 29 - 147 |
| 13C12-1234678-HpCDF   | 37   | 28 - 143 |
| 13C12-1234789-HpCDF   | 33   | 26 - 138 |
| 13C12-OCDF            | 27   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 40   | 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:** **EB11-SA5C-113010 Water**  
**SSFL Area IV Collocated Soil Sampling**  
**EB11-SA5C-113010**

**LLI Sample #** **WW 6152676**  
**LLI Group #** **1223255**  
**Account #** **13013**

**Project Name:** **SSFL Area IV Collocated Soil Sampling**

**Collected:** 11/30/2010 14:10 by PH

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

**Submitted:** 12/01/2010 09:20

**Reported:** 01/28/2011 16:51

**DEB11 SDG#:** DX011-15EB\*

| 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      | 10349001 | 12/21/2010 13:44       | Nelson H Risser  | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 1      | 10349001 | 12/15/2010 06:40       | Ginelle L Haines | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 2      | 11018003 | 01/19/2011 06:00       | Ginelle L Haines | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 01/28/11 at 04:51 PM

Group Number: 1223255

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: 10343162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6152669-6152674 |             |           |              | 100      |           | 80-120          |     |         |
| Batch number: 10344162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6152675         |             |           |              | 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: 10340002 | Sample number(s): 6152669-6152675 |             |           |              |          |           |                 |     |         |
| 2378-TCDD              | 0.00867 J                         | 0.00580     | 1.00      | ng/kg        | 99       |           | 67-158          |     |         |
| 12378-PeCDD            | 0.0365 J                          | 0.00860     | 5.00      | ng/kg        | 102      |           | 70-142          |     |         |
| 123478-HxCDD           | 0.0217 J                          | 0.00840     | 5.00      | ng/kg        | 103      |           | 70-164          |     |         |
| 123678-HxCDD           | 0.0254 J                          | 0.00860     | 5.00      | ng/kg        | 101      |           | 76-134          |     |         |
| 123789-HxCDD           | 0.0228 J                          | 0.00860     | 5.00      | ng/kg        | 101      |           | 64-162          |     |         |
| 1234678-HpCDD          | 0.167 J                           | 0.0108      | 5.00      | ng/kg        | 103      |           | 70-140          |     |         |
| OCDD                   | 0.285 J                           | 0.0115      | 10.0      | ng/kg        | 103      |           | 78-144          |     |         |
| 2378-TCDF              | 0.0155 J                          | 0.00700     | 1.00      | ng/kg        | 102      |           | 75-158          |     |         |
| 12378-PeCDF            | 0.0423 J                          | 0.00570     | 5.00      | ng/kg        | 102      |           | 80-134          |     |         |
| 23478-PeCDF            | 0.110 J                           | 0.00530     | 5.00      | ng/kg        | 102      |           | 68-160          |     |         |
| 123478-HxCDF           | 0.0938 J                          | 0.0104      | 5.00      | ng/kg        | 102      |           | 72-134          |     |         |
| 123678-HxCDF           | 0.0743 J                          | 0.00990     | 5.00      | ng/kg        | 101      |           | 84-130          |     |         |
| 123789-HxCDF           | 0.0541 J                          | 0.0115      | 5.00      | ng/kg        | 100      |           | 78-130          |     |         |
| 234678-HxCDF           | 0.124 J                           | 0.0104      | 5.00      | ng/kg        | 102      |           | 70-156          |     |         |
| 1234678-HpCDF          | 0.453 J                           | 0.00690     | 5.00      | ng/kg        | 101      |           | 82-122          |     |         |
| 1234789-HpCDF          | 0.0638 J                          | 0.00880     | 5.00      | ng/kg        | 103      |           | 78-138          |     |         |
| OCDF                   | 0.272 J                           | 0.00990     | 10.0      | ng/kg        | 102      |           | 63-170          |     |         |
| Batch number: 10349001 | Sample number(s): 6152676         |             |           |              |          |           |                 |     |         |
| 2378-TCDD              | 0.748 U                           | 0.748       | 2.00      | pg/l         | 105      |           | 67-158          |     |         |
| 12378-PeCDD            | 1.56 J                            | 0.597       | 10.0      | pg/l         | 115      |           | 70-142          |     |         |
| 123478-HxCDD           | 1.17 J                            | 0.417       | 10.0      | pg/l         | 124      |           | 70-164          |     |         |
| 123678-HxCDD           | 0.874 J                           | 0.439       | 10.0      | pg/l         | 119      |           | 76-134          |     |         |
| 123789-HxCDD           | 1.40 J                            | 0.428       | 10.0      | pg/l         | 120      |           | 64-162          |     |         |
| 1234678-HpCDD          | 3.15 J                            | 0.580       | 10.0      | pg/l         | 125      |           | 70-140          |     |         |
| OCDD                   | 6.75 J                            | 0.712       | 20.0      | pg/l         | 134      |           | 78-144          |     |         |
| 2378-TCDF              | 0.414 J                           | 0.376       | 2.00      | pg/l         | 98       |           | 75-158          |     |         |
| 12378-PeCDF            | 1.22 J                            | 0.366       | 10.0      | pg/l         | 111      |           | 80-134          |     |         |
| 23478-PeCDF            | 1.70 J                            | 0.326       | 10.0      | pg/l         | 109      |           | 68-160          |     |         |
| 123478-HxCDF           | 1.35 J                            | 0.343       | 10.0      | pg/l         | 119      |           | 72-134          |     |         |
| 123678-HxCDF           | 1.31 J                            | 0.343       | 10.0      | pg/l         | 122      |           | 84-130          |     |         |
| 123789-HxCDF           | 1.86 J                            | 0.379       | 10.0      | pg/l         | 118      |           | 78-130          |     |         |
| 234678-HxCDF           | 1.72 J                            | 0.329       | 10.0      | pg/l         | 115      |           | 70-156          |     |         |
| 1234678-HpCDF          | 5.79 J                            | 0.346       | 10.0      | pg/l         | 125*     |           | 82-122          |     |         |
| 1234789-HpCDF          | 2.97 J                            | 0.451       | 10.0      | pg/l         | 129      |           | 78-138          |     |         |
| OCDF                   | 3.65 J                            | 0.750       | 20.0      | pg/l         | 133      |           | 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: 01/28/11 at 04:51 PM

Group Number: 1223255

| Analysis Name | Blank Result | Blank EDL** | Blank MRL | Report Units | OPR %REC | OPRD %REC | OPR/OPRD Limits | RPD | RPD Max |
|---------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
|---------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|

## 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: 10343162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6152669-6152674 BKG: P148500<br>7.2 7.0 2 20 |          |               |     |         |          |          |         |             |
| Batch number: 10344162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6152675 BKG: P152651<br>9.3 8.5 9 20         |          |               |     |         |          |          |         |             |

## Surrogate Quality Control

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

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

Batch number: 10340002

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF  | 13C12-123678-HxCDF    | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|---------------------|-----------------------|--------------------|--------------------|
| 6152669 | 61                  | 71                  | 63                  | 62                    | 64                 | 64                 |
| 6152670 | 72                  | 77                  | 68                  | 68                    | 69                 | 73                 |
| 6152671 | 70                  | 78                  | 69                  | 69                    | 69                 | 70                 |
| 6152672 | 76                  | 81                  | 74                  | 72                    | 73                 | 74                 |
| 6152673 | 64                  | 80                  | 72                  | 69                    | 69                 | 68                 |
| 6152674 | 52                  | 64                  | 63                  | 62                    | 60                 | 59                 |
| 6152675 | 58                  | 73                  | 70                  | 71                    | 71                 | 69                 |
| Blank   | 68                  | 69                  | 66                  | 66                    | 64                 | 66                 |
| OPR     | 74                  | 74                  | 69                  | 69                    | 69                 | 71                 |
| 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 |
| 6152669 | 67                  | 61                  | 53                  | 72                    | 73                 | 68                 |
| 6152670 | 71                  | 67                  | 59                  | 82                    | 80                 | 74                 |
| 6152671 | 74                  | 63                  | 54                  | 81                    | 80                 | 75                 |
| 6152672 | 75                  | 68                  | 57                  | 83                    | 83                 | 77                 |
| 6152673 | 75                  | 65                  | 55                  | 79                    | 83                 | 75                 |
| 6152674 | 64                  | 58                  | 50                  | 60                    | 66                 | 66                 |
| 6152675 | 77                  | 66                  | 57                  | 66                    | 77                 | 78                 |
| Blank   | 67                  | 61                  | 54                  | 75                    | 72                 | 72                 |
| OPR     | 75                  | 65                  | 57                  | 79                    | 79                 | 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  |

\*- 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: 01/28/11 at 04:51 PM

Group Number: 1223255

### Surrogate Quality Control

|                                              |                     |                     |                     |                          |                    |                    |
|----------------------------------------------|---------------------|---------------------|---------------------|--------------------------|--------------------|--------------------|
| 6152669                                      | 66                  | 67                  | 67                  | 60                       | 61                 | 70                 |
| 6152670                                      | 69                  | 71                  | 74                  | 67                       | 71                 | 77                 |
| 6152671                                      | 69                  | 71                  | 74                  | 66                       | 70                 | 77                 |
| 6152672                                      | 73                  | 76                  | 76                  | 65                       | 76                 | 81                 |
| 6152673                                      | 72                  | 70                  | 72                  | 61                       | 68                 | 79                 |
| 6152674                                      | 61                  | 62                  | 64                  | 55                       | 53                 | 62                 |
| 6152675                                      | 73                  | 73                  | 75                  | 66                       | 56                 | 72                 |
| Blank                                        | 67                  | 67                  | 68                  | 60                       | 67                 | 69                 |
| OPR                                          | 72                  | 74                  | 75                  | 71                       | 70                 | 76                 |
| Limits:                                      | 28-130              | 28-130              | 23-140              | 17-157                   | 24-169             | 24-185             |
| Analysis Name: 10b Dioxin/Furan by EPA 1613B |                     |                     |                     |                          |                    |                    |
| Batch number: 10349001                       |                     |                     |                     |                          |                    |                    |
|                                              | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF  | 13C12-123678-HxCDF       | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
| 6152676                                      | 28                  | 42                  | 38                  | 38                       | 40                 | 39                 |
| Blank                                        | 11*                 | 19*                 | 18*                 | 17*                      | 18*                | 17*                |
| OPR                                          | 18*                 | 33                  | 30                  | 29                       | 30                 | 28*                |
| Limits:                                      | 25-164              | 21-178              | 26-152              | 26-123                   | 28-136             | 29-147             |
|                                              | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF          | 13C12-1278-TCDD<br>(CRS) | 13C12-12378-PeCDD  | 13C12-123478-HxCDD |
| 6152676                                      | 37                  | 33                  | 27                  | 40                       | 39                 | 38                 |
| Blank                                        | 16*                 | 15*                 | 12*                 | 20*                      | 16*                | 17*                |
| OPR                                          | 27*                 | 24*                 | 18                  | 31*                      | 29                 | 30*                |
| 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  |
| 6152676                                      | 36                  | 37                  | 35                  | 28                       | 41                 | 41                 |
| Blank                                        | 16*                 | 17*                 | 16*                 | 12*                      | 18*                | 18*                |
| OPR                                          | 28                  | 27*                 | 26                  | 19                       | 29                 | 31                 |
| Limits:                                      | 28-130              | 28-130              | 23-140              | 17-157                   | 24-169             | 24-185             |

\*- Outside of specification

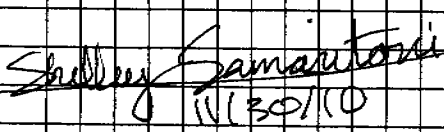
\*\* - This limit was used in the evaluation of the final result for the blank

(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 1703255 6152669-76

## CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    | Other Instructions and Notes |                        |                              |                |                     |                     |                            |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------|--------|-----------------------------------------|--------------------------|-----------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|----------------------|--------------------------|-----------------------|--------------------|------------------------------|------------------------|------------------------------|----------------|---------------------|---------------------|----------------------------|--|--|--|--|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |          |               |        |                                         |                          | VOCs/EPA 8260B  | 1,4-Dioxane EPA 8260S/M | SVOCs EPA 8270C & PAHs 8270 S/M | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **Hydrazine EPA 8315A | **n-NDMA EPA 1625C |                              | **Energetics EPA 8330A | **Cyanide EPA 9012B          | **pH EPA 9045C | **Alcohol EPA 8015B | **Glycols EPA 8015B | **Terphenyls EPA 8015B     |  |  |  |  |  |
| SAMPLE NUMBER                                                                                                                                                             | DATE     | TIME          | MATRIX | Preservative                            | Type & No. of Containers |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
| EB11-SA5C-113010                                                                                                                                                          | 11.30.10 | 1410          | water  | none                                    | 6 - 1 Liter amber glass  |                 |                         | X                               |                   |                        |                              |                       | X                   | X              |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     | Plus 2 extra amber bottles |  |  |  |  |  |
| EB11-SA5C-113010                                                                                                                                                          | 11.30.10 | 1410          | water  | none                                    | 1 - 500 mL poly bottle   |                 |                         |                                 |                   |                        | X                            | X                     |                     |                | X                       |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
| EB11-SA5C-113010                                                                                                                                                          | 11.30.10 | 1410          | water  | HNO <sub>3</sub>                        | 1 - 500 mL poly bottle   |                 |                         |                                 |                   | X                      |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
| EB11-SA5C-113010                                                                                                                                                          | 11.30.10 | 1410          | water  | HCl                                     | 3 - 40 ml VOA vials      | X               | X                       |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
| TB-113010                                                                                                                                                                 | 11.30.10 | 1530          | water  | HCl                                     | 3 - 40 ml vials          | X               | X                       |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     | Trip Blank                 |  |  |  |  |  |
| SL-074-SA5C-SB-4.5                                                                                                                                                        | 11.30.10 | 1105          | soil   | none                                    | 4 encore samplers        | X               | X                       |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
| SL-057-SA5C-SB-4.5                                                                                                                                                        | 11.30.10 | 0928          | soil   | none                                    | 4 encore samplers        | X               | X                       |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
| SL-070-SA5C-SB-4.5                                                                                                                                                        | 11.30.10 | 1330          | soil   | none                                    | 4 encore samplers        | X               | X                       |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
| SL-043-SA5C-SB-2.5                                                                                                                                                        | 11.30.10 | 1503          | soil   | none                                    | 4 encore samplers        | X               | X                       |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
| <div style="text-align: center;"> <br/>           11/30/10         </div>               |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
|                                                                                                                                                                           |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
|                                                                                                                                                                           |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
|                                                                                                                                                                           |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
|                                                                                                                                                                           |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
|                                                                                                                                                                           |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
|                                                                                                                                                                           |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
|                                                                                                                                                                           |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
|                                                                                                                                                                           |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
|                                                                                                                                                                           |          |               |        |                                         |                          |                 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |
| Relinquished by: (Signature)                                                                                                                                              |          | Date/Time     |        | Received for Laboratory by: (Signature) |                          | Date/Time       |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        | Laboratory:                  |                |                     |                     |                            |  |  |  |  |  |
| Shelley Samantoni                                                                                                                                                         |          | 11.30.10 1630 |        | Harry H. H.                             |                          | 12/1/10 920     |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        | Lancaster Laboratories, Inc. |                |                     |                     |                            |  |  |  |  |  |
| Received by: (Signature)                                                                                                                                                  |          | Date/Time     |        | Airbill No.                             |                          | Tracking Number |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        | Cooler 2                     |                |                     |                     |                            |  |  |  |  |  |
| FedEx                                                                                                                                                                     |          |               |        | 00732992                                |                          | 869514319262    |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                              |                |                     |                     |                            |  |  |  |  |  |

6152669-76

[illegible]

# Explanation of Symbols and Abbreviations

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

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | 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.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | 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. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | 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 |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | 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 12, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/02/2010

Group Number: 1223467

SDG: DX012

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-046-SA5C-SB-4.0-5.0 Soil      | 6153699                       |
| SL-046-SA5C-SB-9.0-10.0 Soil     | 6153700                       |
| SL-044-SA5C-SB-4.0-5.0 Soil      | 6153701                       |
| SL-044-SA5C-SB-9.0-10.0 Soil     | 6153702                       |
| SL-045-SA5C-SB-4.0-5.0 Soil      | 6153703                       |
| SL-047-SA5C-SB-4.0-5.0 Soil      | 6153704                       |
| SL-045-SA5C-SB-8.0-9.0 Soil      | 6153705                       |

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

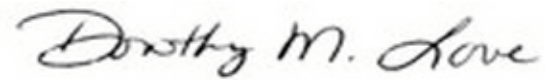
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COPY TO  
1 COPY TO

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-046-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA5C-SB-4.0-5.0

LLI Sample # SW 6153699  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 10:18 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4645 SDG#: DX012-01

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-046-SA5C-SB-4.0-5.0 Soil  
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Reported: 01/12/2011 20:18

D4645 SDG#: DX012-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0154 U     | 0.0154       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0460 JBQ   | 0.0205       | 5.39         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0971 JBQ   | 0.0321       | 5.39         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.408 JB     | 0.0323       | 5.39         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.263 JB     | 0.0328       | 5.39         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 21.3 B       | 0.0423       | 5.39         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 260 B        | 0.0528       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0231 JBQ   | 0.0157       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0536 JBQ   | 0.0122       | 5.39         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0608 JBQ   | 0.0115       | 5.39         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0998 JBQ   | 0.0220       | 5.39         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0928 JB    | 0.0202       | 5.39         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.109 JBQ    | 0.0242       | 5.39         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.164 JBQ    | 0.0209       | 5.39         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.53 JB      | 0.0152       | 5.39         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.165 JB     | 0.0189       | 5.39         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 12.6 B       | 0.0258       | 10.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 83   | 25 - 164 |
| 13C12-12378-PeCDD     | 96   | 25 - 181 |
| 13C12-123478-HxCDD    | 83   | 32 - 141 |
| 13C12-123678-HxCDD    | 79   | 28 - 130 |
| 13C12-123789-HxCDD    | 80   | 28 - 130 |
| 13C12-1234678-HpCDD   | 77   | 23 - 140 |
| 13C12-OCDD            | 63   | 17 - 157 |
| 13C12-2378-TCDF       | 83   | 24 - 169 |
| 13C12-12378-PeCDF     | 95   | 24 - 185 |
| 13C12-23478-PeCDF     | 95   | 21 - 178 |
| 13C12-123478-HxCDF    | 82   | 26 - 152 |
| 13C12-123678-HxCDF    | 82   | 26 - 123 |
| 13C12-234678-HxCDF    | 80   | 28 - 136 |
| 13C12-123789-HxCDF    | 79   | 29 - 147 |
| 13C12-1234678-HpCDF   | 80   | 28 - 143 |
| 13C12-1234789-HpCDF   | 70   | 26 - 138 |
| 13C12-OCDF            | 57   | 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-046-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6153699  
**LLI Group #** 1223467  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/01/2010 10:18 by PH

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

**Submitted:** 12/02/2010 09:15

**Reported:** 01/12/2011 20:18

D4645 SDG#: DX012-01

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

**Sample Description:** SL-046-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA5C-SB-4.0-5.0

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Chantilly VA 20151

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4645 SDG#: DX012-01

## 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      | 10347001     | 12/20/2010 15:36       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 2      | 10347162401A | 12/14/2010 05:05       | William C Schwebel | 1               |



# Analysis Report

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**Sample Description:** SL-046-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA5C-SB-9.0-10.0

LLI Sample # SW 6153700  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 10:23 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4691 SDG#: DX012-02

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 7.9        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-046-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA5C-SB-9.0-10.0

LLI Sample # SW 6153700  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 10:23 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4691 SDG#: DX012-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0262 JBQ   | 0.0128       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0142 U     | 0.0142       | 5.43         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0110 U     | 0.0110       | 5.43         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0117 U     | 0.0117       | 5.43         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0267 JB    | 0.0116       | 5.43         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.155 JB     | 0.0155       | 5.43         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.618 JB     | 0.0200       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0126 JBQ   | 0.0112       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0209 JBQ   | 0.00803      | 5.43         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0521 JB    | 0.00760      | 5.43         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0535 JBQ   | 0.00999      | 5.43         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0395 JBQ   | 0.00901      | 5.43         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0342 JB    | 0.0106       | 5.43         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0474 JBQ   | 0.00977      | 5.43         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.212 JB     | 0.00684      | 5.43         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0429 JBQ   | 0.0101       | 5.43         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.161 JB     | 0.0187       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 74   | 25 - 164 |
| 13C12-12378-PeCDD     | 86   | 25 - 181 |
| 13C12-123478-HxCDD    | 81   | 32 - 141 |
| 13C12-123678-HxCDD    | 74   | 28 - 130 |
| 13C12-123789-HxCDD    | 76   | 28 - 130 |
| 13C12-1234678-HpCDD   | 74   | 23 - 140 |
| 13C12-OCDD            | 61   | 17 - 157 |
| 13C12-2378-TCDF       | 74   | 24 - 169 |
| 13C12-12378-PeCDF     | 87   | 24 - 185 |
| 13C12-23478-PeCDF     | 84   | 21 - 178 |
| 13C12-123478-HxCDF    | 76   | 26 - 152 |
| 13C12-123678-HxCDF    | 77   | 26 - 123 |
| 13C12-234678-HxCDF    | 74   | 28 - 136 |
| 13C12-123789-HxCDF    | 76   | 29 - 147 |
| 13C12-1234678-HpCDF   | 81   | 28 - 143 |
| 13C12-1234789-HpCDF   | 64   | 26 - 138 |
| 13C12-OCDF            | 53   | 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-046-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA5C-SB-9.0-10.0

LLI Sample # SW 6153700  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 10:23 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4691 SDG#: DX012-02

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

**Sample Description:** SL-046-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA5C-SB-9.0-10.0

LLI Sample # SW 6153700  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 10:23 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4691 SDG#: DX012-02

## 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      | 10347001     | 12/20/2010 16:33       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 2      | 10347162401A | 12/14/2010 05:05       | William C Schwebel | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-044-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-044-SA5C-SB-4.0-5.0

LLI Sample # SW 6153701  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 11:46 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4445 SDG#: DX012-03

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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:** SL-044-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-044-SA5C-SB-4.0-5.0

LLI Sample # SW 6153701  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 11:46 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4445 SDG#: DX012-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0484 JBQ   | 0.0209       | 1.16         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0584 JBQ   | 0.0258       | 5.80         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0180 U     | 0.0180       | 5.80         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0445 JBQ   | 0.0176       | 5.80         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0221 JBQ   | 0.0181       | 5.80         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.212 JB     | 0.0246       | 5.80         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.738 JB     | 0.0305       | 11.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0209 U     | 0.0209       | 1.16         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0181 JBQ   | 0.0144       | 5.80         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0702 JBQ   | 0.0140       | 5.80         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0681 JBQ   | 0.0162       | 5.80         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0401 JB    | 0.0147       | 5.80         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0738 JBQ   | 0.0180       | 5.80         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0822 JB    | 0.0159       | 5.80         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.248 JB     | 0.0111       | 5.80         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0690 JB    | 0.0167       | 5.80         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.262 JB     | 0.0289       | 11.6         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 81   | 25 - 164 |
| 13C12-12378-PeCDD     | 91   | 25 - 181 |
| 13C12-123478-HxCDD    | 82   | 32 - 141 |
| 13C12-123678-HxCDD    | 78   | 28 - 130 |
| 13C12-123789-HxCDD    | 80   | 28 - 130 |
| 13C12-1234678-HpCDD   | 84   | 23 - 140 |
| 13C12-OCDD            | 77   | 17 - 157 |
| 13C12-2378-TCDF       | 75   | 24 - 169 |
| 13C12-12378-PeCDF     | 91   | 24 - 185 |
| 13C12-23478-PeCDF     | 86   | 21 - 178 |
| 13C12-123478-HxCDF    | 75   | 26 - 152 |
| 13C12-123678-HxCDF    | 79   | 26 - 123 |
| 13C12-234678-HxCDF    | 76   | 28 - 136 |
| 13C12-123789-HxCDF    | 75   | 29 - 147 |
| 13C12-1234678-HpCDF   | 91   | 28 - 143 |
| 13C12-1234789-HpCDF   | 72   | 26 - 138 |
| 13C12-OCDF            | 63   | 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-044-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-044-SA5C-SB-4.0-5.0

LLI Sample # SW 6153701  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 11:46 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4445 SDG#: DX012-03

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

**Sample Description:** SL-044-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-044-SA5C-SB-4.0-5.0

LLI Sample # SW 6153701  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 11:46 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4445 SDG#: DX012-03

## 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      | 10347001     | 12/20/2010 17:29       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 2      | 10347162401A | 12/14/2010 05:05       | William C Schwebel | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-044-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-044-SA5C-SB-9.0-10.0

LLI Sample # SW 6153702  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 11:50 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4491 SDG#: DX012-04

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-044-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-044-SA5C-SB-9.0-10.0

LLI Sample # SW 6153702  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 11:50 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4491 SDG#: DX012-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0163 U     | 0.0163       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0192 U     | 0.0192       | 5.68         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0136 U     | 0.0136       | 5.68         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0345 JBQ   | 0.0140       | 5.68         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0521 JB    | 0.0139       | 5.68         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.364 JBQ    | 0.0240       | 5.68         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.86 JB      | 0.0308       | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0246 JBQ   | 0.0172       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0343 JBQ   | 0.0107       | 5.68         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0866 JBQ   | 0.00977      | 5.68         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0499 JB    | 0.0118       | 5.68         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0328 JBQ   | 0.0105       | 5.68         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0515 JBQ   | 0.0135       | 5.68         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0572 JBQ   | 0.0111       | 5.68         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.229 JBQ    | 0.0106       | 5.68         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0493 JBQ   | 0.0165       | 5.68         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.333 JB     | 0.0294       | 11.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 78   | 25 - 164 |
| 13C12-12378-PeCDD     | 94   | 25 - 181 |
| 13C12-123478-HxCDD    | 72   | 32 - 141 |
| 13C12-123678-HxCDD    | 69   | 28 - 130 |
| 13C12-123789-HxCDD    | 70   | 28 - 130 |
| 13C12-1234678-HpCDD   | 68   | 23 - 140 |
| 13C12-OCDD            | 54   | 17 - 157 |
| 13C12-2378-TCDF       | 70   | 24 - 169 |
| 13C12-12378-PeCDF     | 91   | 24 - 185 |
| 13C12-23478-PeCDF     | 91   | 21 - 178 |
| 13C12-123478-HxCDF    | 69   | 26 - 152 |
| 13C12-123678-HxCDF    | 72   | 26 - 123 |
| 13C12-234678-HxCDF    | 69   | 28 - 136 |
| 13C12-123789-HxCDF    | 63   | 29 - 147 |
| 13C12-1234678-HpCDF   | 77   | 28 - 143 |
| 13C12-1234789-HpCDF   | 57   | 26 - 138 |
| 13C12-OCDF            | 44   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 82   | 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-044-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-044-SA5C-SB-9.0-10.0

LLI Sample # SW 6153702  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 11:50 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4491 SDG#: DX012-04

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

**Sample Description:** SL-044-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-044-SA5C-SB-9.0-10.0

LLI Sample # SW 6153702  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 11:50 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4491 SDG#: DX012-04

## 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      | 10347001     | 12/20/2010 18:26       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10347162401A | 12/14/2010 05:05       | William C Schwebel | 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-045-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA5C-SB-4.0-5.0

LLI Sample # SW 6153703  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 14:18 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4545 SDG#: DX012-05

| CAT No.                   | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                               |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                               |            |            |                             |                           |                 |
| 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-045-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6153703  
**LLI Group #** 1223467  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/01/2010 14:18 by PH

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

**Submitted:** 12/02/2010 09:15

**Reported:** 01/12/2011 20:18

D4545 SDG#: DX012-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0300 JBQ   | 0.0154       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0434 JBQ   | 0.0159       | 5.56         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0127 U     | 0.0127       | 5.56         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0220 JBQ   | 0.0129       | 5.56         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0338 JBQ   | 0.0125       | 5.56         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.175 JB     | 0.0194       | 5.56         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.398 JBQ    | 0.0250       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0182 JBQ   | 0.0142       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0198 JBQ   | 0.0102       | 5.56         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0449 JBQ   | 0.00934      | 5.56         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0380 JBQ   | 0.00990      | 5.56         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0252 JBQ   | 0.00901      | 5.56         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0426 JB    | 0.0103       | 5.56         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0492 JBQ   | 0.00945      | 5.56         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.161 JBQ    | 0.00845      | 5.56         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0559 JBQ   | 0.0112       | 5.56         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.164 JBQ    | 0.0216       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 72   | 25 - 164 |
| 13C12-12378-PeCDD     | 86   | 25 - 181 |
| 13C12-123478-HxCDD    | 69   | 32 - 141 |
| 13C12-123678-HxCDD    | 66   | 28 - 130 |
| 13C12-123789-HxCDD    | 68   | 28 - 130 |
| 13C12-1234678-HpCDD   | 64   | 23 - 140 |
| 13C12-OCDD            | 51   | 17 - 157 |
| 13C12-2378-TCDF       | 67   | 24 - 169 |
| 13C12-12378-PeCDF     | 82   | 24 - 185 |
| 13C12-23478-PeCDF     | 83   | 21 - 178 |
| 13C12-123478-HxCDF    | 66   | 26 - 152 |
| 13C12-123678-HxCDF    | 67   | 26 - 123 |
| 13C12-234678-HxCDF    | 66   | 28 - 136 |
| 13C12-123789-HxCDF    | 68   | 29 - 147 |
| 13C12-1234678-HpCDF   | 68   | 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:** SL-045-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA5C-SB-4.0-5.0

LLI Sample # SW 6153703  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 14:18 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4545 SDG#: DX012-05

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



# Analysis Report

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

Page 4 of 4

**Sample Description:** SL-045-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA5C-SB-4.0-5.0

LLI Sample # SW 6153703  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 14:18 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4545 SDG#: DX012-05

## 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      | 10347001     | 12/20/2010 19:23       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10342162401B | 12/08/2010 11:42       | William C Schwebel | 1               |

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

**Sample Description:** SL-047-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6153704  
**LLI Group #** 1223467  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/01/2010 15:29 by PH

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

**Submitted:** 12/02/2010 09:15

**Reported:** 01/12/2011 20:18

D4745 SDG#: DX012-06

| CAT<br>No.           | Analysis Name                 | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|-------------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                               |            |               |                                   |                                 |                    |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 13.5          | 0.50                              | 0.50                            | 1                  |

**Sample Description:** SL-047-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA5C-SB-4.0-5.0

LLI Sample # SW 6153704  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 15:29 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4745 SDG#: DX012-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0276 JBQ   | 0.0158       | 1.16         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0256 JBQ   | 0.0170       | 5.78         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0128 JBQ   | 0.0126       | 5.78         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0338 JBQ   | 0.0129       | 5.78         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0230 JB    | 0.0127       | 5.78         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.140 JBQ    | 0.0201       | 5.78         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.502 JB     | 0.0244       | 11.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0155 JBQ   | 0.0140       | 1.16         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0383 JB    | 0.00936      | 5.78         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.102 JBQ    | 0.00867      | 5.78         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0512 JBQ   | 0.0116       | 5.78         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0410 JB    | 0.0102       | 5.78         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0579 JB    | 0.0128       | 5.78         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0815 JB    | 0.0113       | 5.78         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.254 JB     | 0.00855      | 5.78         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0507 JBQ   | 0.0128       | 5.78         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.160 JBQ    | 0.0246       | 11.6         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 78   | 25 - 164 |
| 13C12-12378-PeCDD     | 98   | 25 - 181 |
| 13C12-123478-HxCDD    | 78   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 73   | 28 - 130 |
| 13C12-1234678-HpCDD   | 69   | 23 - 140 |
| 13C12-OCDD            | 54   | 17 - 157 |
| 13C12-2378-TCDF       | 72   | 24 - 169 |
| 13C12-12378-PeCDF     | 96   | 24 - 185 |
| 13C12-23478-PeCDF     | 94   | 21 - 178 |
| 13C12-123478-HxCDF    | 71   | 26 - 152 |
| 13C12-123678-HxCDF    | 75   | 26 - 123 |
| 13C12-234678-HxCDF    | 71   | 28 - 136 |
| 13C12-123789-HxCDF    | 69   | 29 - 147 |
| 13C12-1234678-HpCDF   | 78   | 28 - 143 |
| 13C12-1234789-HpCDF   | 59   | 26 - 138 |
| 13C12-OCDF            | 45   | 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-047-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA5C-SB-4.0-5.0

LLI Sample # SW 6153704  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 15:29 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4745 SDG#: DX012-06

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

**Sample Description:** SL-047-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA5C-SB-4.0-5.0

LLI Sample # SW 6153704  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 15:29 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4745 SDG#: DX012-06

---

### 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      | 10347001     | 12/20/2010 20:19       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10342162401B | 12/08/2010 11:42       | William C Schwebel | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-045-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA5C-SB-8.0-9.0

LLI Sample # SW 6153705  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 14:22 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4589 SDG#: DX012-07

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 7.0        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-045-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA5C-SB-8.0-9.0

**LLI Sample #** SW 6153705  
**LLI Group #** 1223467  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/01/2010 14:22 by PH

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

**Submitted:** 12/02/2010 09:15

**Reported:** 01/12/2011 20:18

D4589 SDG#: DX012-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0428 JBQ   | 0.0147       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0561 JBQ   | 0.0160       | 5.38         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0282 JBQ   | 0.0147       | 5.38         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0445 JBQ   | 0.0147       | 5.38         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0400 JBQ   | 0.0141       | 5.38         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.197 JB     | 0.0208       | 5.38         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.14 JB      | 0.0253       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0137 U     | 0.0137       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0508 JBQ   | 0.00935      | 5.38         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0728 JBQ   | 0.00892      | 5.38         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0716 JBQ   | 0.0112       | 5.38         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0551 JBQ   | 0.0102       | 5.38         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0918 JBQ   | 0.0118       | 5.38         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0516 JBQ   | 0.0108       | 5.38         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.194 JB     | 0.00925      | 5.38         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.108 JBQ    | 0.0135       | 5.38         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.183 JBQ    | 0.0191       | 10.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 65   | 25 - 164 |
| 13C12-12378-PeCDD     | 75   | 25 - 181 |
| 13C12-123478-HxCDD    | 72   | 32 - 141 |
| 13C12-123678-HxCDD    | 68   | 28 - 130 |
| 13C12-123789-HxCDD    | 70   | 28 - 130 |
| 13C12-1234678-HpCDD   | 66   | 23 - 140 |
| 13C12-OCDD            | 53   | 17 - 157 |
| 13C12-2378-TCDF       | 62   | 24 - 169 |
| 13C12-12378-PeCDF     | 74   | 24 - 185 |
| 13C12-23478-PeCDF     | 73   | 21 - 178 |
| 13C12-123478-HxCDF    | 68   | 26 - 152 |
| 13C12-123678-HxCDF    | 71   | 26 - 123 |
| 13C12-234678-HxCDF    | 69   | 28 - 136 |
| 13C12-123789-HxCDF    | 70   | 29 - 147 |
| 13C12-1234678-HpCDF   | 73   | 28 - 143 |
| 13C12-1234789-HpCDF   | 58   | 26 - 138 |
| 13C12-OCDF            | 46   | 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-045-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA5C-SB-8.0-9.0

LLI Sample # SW 6153705  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 14:22 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4589 SDG#: DX012-07

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

**Sample Description:** SL-045-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA5C-SB-8.0-9.0

LLI Sample # SW 6153705  
LLI Group # 1223467  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/01/2010 14:22 by PH

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

Submitted: 12/02/2010 09:15

Reported: 01/12/2011 20:18

D4589 SDG#: DX012-07

## 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      | 10347001     | 12/21/2010 00:19       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10342162401B | 12/08/2010 11:42       | William C Schwebel | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 01/12/11 at 08:18 PM

Group Number: 1223467

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: 10342162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6153703-6153705 |             |           |              | 100      |           | 80-120          |     |         |
| Batch number: 10347162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6153699-6153702 |             |           |              | 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: 10347001 | Sample number(s): 6153699-6153705 |             |           |              |          |           |                 |     |         |
| 2378-TCDD              | 0.0140 J                          | 0.0113      | 1.00      | ng/kg        | 96       |           | 67-158          |     |         |
| 12378-PeCDD            | 0.0265 J                          | 0.0138      | 5.00      | ng/kg        | 98       |           | 70-142          |     |         |
| 123478-HxCDD           | 0.0197 J                          | 0.0114      | 5.00      | ng/kg        | 102      |           | 70-164          |     |         |
| 123678-HxCDD           | 0.0273 J                          | 0.0117      | 5.00      | ng/kg        | 99       |           | 76-134          |     |         |
| 123789-HxCDD           | 0.0160 J                          | 0.0114      | 5.00      | ng/kg        | 100      |           | 64-162          |     |         |
| 1234678-HpCDD          | 0.126 J                           | 0.0158      | 5.00      | ng/kg        | 100      |           | 70-140          |     |         |
| OCDD                   | 0.227 J                           | 0.0214      | 10.0      | ng/kg        | 100      |           | 78-144          |     |         |
| 2378-TCDF              | 0.0210 J                          | 0.0114      | 1.00      | ng/kg        | 101      |           | 75-158          |     |         |
| 12378-PeCDF            | 0.0411 J                          | 0.00830     | 5.00      | ng/kg        | 98       |           | 80-134          |     |         |
| 23478-PeCDF            | 0.0683 J                          | 0.00790     | 5.00      | ng/kg        | 99       |           | 68-160          |     |         |
| 123478-HxCDF           | 0.0608 J                          | 0.0111      | 5.00      | ng/kg        | 95       |           | 72-134          |     |         |
| 123678-HxCDF           | 0.0469 J                          | 0.0100      | 5.00      | ng/kg        | 93       |           | 84-130          |     |         |
| 123789-HxCDF           | 0.0780 J                          | 0.0116      | 5.00      | ng/kg        | 98       |           | 78-130          |     |         |
| 234678-HxCDF           | 0.0717 J                          | 0.0104      | 5.00      | ng/kg        | 97       |           | 70-156          |     |         |
| 1234678-HpCDF          | 0.213 J                           | 0.00770     | 5.00      | ng/kg        | 97       |           | 82-122          |     |         |
| 1234789-HpCDF          | 0.0802 J                          | 0.0114      | 5.00      | ng/kg        | 99       |           | 78-138          |     |         |
| OCDF                   | 0.195 J                           | 0.0198      | 10.0      | ng/kg        | 98       |           | 63-170          |     |         |

## Sample Matrix Quality Control

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

| Analysis Name                                               | MS %REC                           | MSD %REC | MS/MSD Limits | RPD | RPD MAX              | BKG Conc             | DUP Conc | DUP RPD | Dup RPD Max |
|-------------------------------------------------------------|-----------------------------------|----------|---------------|-----|----------------------|----------------------|----------|---------|-------------|
| Batch number: 10342162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6153703-6153705 |          |               |     |                      | BKG: P154848<br>13.0 | 12.0     | 8       | 20          |
| Batch number: 10347162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6153699-6153702 |          |               |     |                      | BKG: P154843<br>21.9 | 30.1     | 32*     | 20          |
| Batch number: 10347001<br>2378-TCDD                         | Sample number(s): 6153699-6153705 |          |               |     | UNSPK: P154853<br>96 |                      |          |         |             |
|                                                             |                                   | 94       | 67-158        | 2   | 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: 01/12/11 at 08:18 PM

Group Number: 1223467

### 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<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 12378-PeCDD   | 97         | 99          | 70-142           | 1   | 25         |             |             |            |                |
| 123478-HxCDD  | 102        | 100         | 70-164           | 2   | 25         |             |             |            |                |
| 123678-HxCDD  | 98         | 98          | 76-134           | 0   | 25         |             |             |            |                |
| 123789-HxCDD  | 100        | 98          | 64-162           | 1   | 25         |             |             |            |                |
| 1234678-HpCDD | 99         | 98          | 70-140           | 1   | 25         |             |             |            |                |
| OCDD          | 100        | 99          | 78-144           | 1   | 25         |             |             |            |                |
| 2378-TCDF     | 98         | 96          | 75-158           | 1   | 25         |             |             |            |                |
| 12378-PeCDF   | 98         | 98          | 80-134           | 0   | 25         |             |             |            |                |
| 23478-PeCDF   | 98         | 98          | 68-160           | 0   | 25         |             |             |            |                |
| 123478-HxCDF  | 98         | 97          | 72-134           | 1   | 25         |             |             |            |                |
| 123678-HxCDF  | 96         | 97          | 84-130           | 1   | 25         |             |             |            |                |
| 123789-HxCDF  | 100        | 97          | 78-130           | 3   | 25         |             |             |            |                |
| 234678-HxCDF  | 98         | 95          | 70-156           | 2   | 25         |             |             |            |                |
| 1234678-HpCDF | 96         | 96          | 82-122           | 1   | 25         |             |             |            |                |
| 1234789-HpCDF | 101        | 100         | 78-138           | 1   | 25         |             |             |            |                |
| OCDF          | 99         | 98          | 63-170           | 1   | 25         |             |             |            |                |

### Surrogate Quality Control

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

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 10347001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF       | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------------|--------------------|--------------------|
| 6153699 | 83                  | 95                  | 82                 | 82                       | 80                 | 79                 |
| 6153700 | 74                  | 84                  | 76                 | 77                       | 74                 | 76                 |
| 6153701 | 81                  | 86                  | 75                 | 79                       | 76                 | 75                 |
| 6153702 | 78                  | 91                  | 69                 | 72                       | 69                 | 63                 |
| 6153703 | 72                  | 83                  | 66                 | 67                       | 66                 | 68                 |
| 6153704 | 78                  | 94                  | 71                 | 75                       | 71                 | 69                 |
| 6153705 | 65                  | 73                  | 68                 | 71                       | 69                 | 70                 |
| Blank   | 75                  | 78                  | 73                 | 76                       | 74                 | 75                 |
| MS      | 86                  | 113                 | 76                 | 79                       | 76                 | 68                 |
| MSD     | 81                  | 88                  | 73                 | 73                       | 74                 | 78                 |
| OPR     | 73                  | 80                  | 69                 | 73                       | 68                 | 65                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123                   | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-1278-TCDD<br>(CRS) | 13C12-12378-PeCDD  | 13C12-123478-HxCDD |
| 6153699 | 80                  | 70                  | 57                 | 93                       | 96                 | 83                 |
| 6153700 | 81                  | 64                  | 53                 | 84                       | 86                 | 81                 |
| 6153701 | 91                  | 72                  | 63                 | 85                       | 91                 | 82                 |
| 6153702 | 77                  | 57                  | 44                 | 82                       | 94                 | 72                 |
| 6153703 | 68                  | 58                  | 45                 | 78                       | 86                 | 69                 |
| 6153704 | 78                  | 59                  | 45                 | 85                       | 98                 | 78                 |
| 6153705 | 73                  | 58                  | 46                 | 71                       | 75                 | 72                 |

\*- 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: 01/12/11 at 08:18 PM

Group Number: 1223467

### Surrogate Quality Control

|         |                    |                    |                     |            |                 |                   |
|---------|--------------------|--------------------|---------------------|------------|-----------------|-------------------|
| Blank   | 82                 | 62                 | 49                  | 81         | 80              | 79                |
| MS      | 84                 | 65                 | 55                  | 92         | 121             | 79                |
| MSD     | 77                 | 62                 | 50                  | 89         | 89              | 76                |
| OPR     | 81                 | 60                 | 50                  | 82         | 87              | 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 |
| 6153699 | 79                 | 80                 | 77                  | 63         | 83              | 95                |
| 6153700 | 74                 | 76                 | 74                  | 61         | 74              | 87                |
| 6153701 | 78                 | 80                 | 84                  | 77         | 75              | 91                |
| 6153702 | 69                 | 70                 | 68                  | 54         | 70              | 91                |
| 6153703 | 66                 | 68                 | 64                  | 51         | 67              | 82                |
| 6153704 | 73                 | 73                 | 69                  | 54         | 72              | 96                |
| 6153705 | 68                 | 70                 | 66                  | 53         | 62              | 74                |
| Blank   | 74                 | 76                 | 73                  | 59         | 71              | 82                |
| MS      | 78                 | 77                 | 75                  | 63         | 75              | 113               |
| MSD     | 73                 | 74                 | 70                  | 56         | 75              | 90                |
| OPR     | 72                 | 73                 | 73                  | 61         | 69              | 85                |
| 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 1223467 6153699-706

## CHAIN OF CUSTODY RECORD

## CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

## NOTES:

\*Primary Analyses as indicated on sample labels

\*\*Secondary Analyses as indicated on sample labels

@ For hex chrome analysis, lab will measure pH and ORP

Samplers: (Signature)

*Shelly Samantoni*

| SAMPLE NUMBER | DATE | TIME | MATRIX | Preservative | Type & No. of Containers |
|---------------|------|------|--------|--------------|--------------------------|
|---------------|------|------|--------|--------------|--------------------------|

|                         |          |      |      |      |                     |
|-------------------------|----------|------|------|------|---------------------|
| SL-046-SA5C-SB-4.0-5.0  | 12.01.10 | 1018 | soil | none | 2 - 16 oz. jars     |
| SL-046-SA5C-SB-4.0-5.0  | 12.01.10 | 1018 | soil | none | 1 - 16 oz. jar      |
| SL-046-SA5C-SB-4.0-5.0  | 12.01.10 | 1018 | soil | none | 3 - 4 oz. jars      |
| SL-046-SA5C-SB-4.0-5.0  | 12.01.10 | 1018 | soil | none | 1 - 4 oz. amber jar |
| SL-046-SA5C-SB-9.0-10.0 | 12.01.10 | 1023 | soil | none | 2 - 16 oz. jars     |
| SL-046-SA5C-SB-9.0-10.0 | 12.01.10 | 1023 | soil | none | 1 - 16 oz. jar      |
| SL-046-SA5C-SB-9.0-10.0 | 12.01.10 | 1023 | soil | none | 3 - 4 oz. jars      |
| SL-046-SA5C-SB-9.0-10.0 | 12.01.10 | 1023 | soil | none | 1 - 4 oz. amber jar |
| SL-044-SA5C-SB-4.0-5.0  | 12.01.10 | 1146 | soil | none | 2 - 16 oz. jars     |
| SL-044-SA5C-SB-4.0-5.0  | 12.01.10 | 1146 | soil | none | 1 - 16 oz. jar      |
| SL-044-SA5C-SB-4.0-5.0  | 12.01.10 | 1146 | soil | none | 3 - 4 oz. jars      |
| SL-044-SA5C-SB-4.0-5.0  | 12.01.10 | 1146 | soil | none | 1 - 4 oz. amber jar |

*Shelly Samantoni*  
12/1/10

Relinquished by: (Signature)

*Shelly Samantoni*

Date/Time

12.01.10 1630

Received for Laboratory by: (Signature)

*Deborah A. Ruel*

Date/Time

12/1/10 0915

Received by: (Signature)

*12/1/10 FedEx*  
*SA 12/1/10*

Date/Time

Airbill No.

00732992

Tracking Number 869514319251

Laboratory:

Lancaster Laboratories, Inc.

Cooler 1

1.4°C

Other Instructions and Notes

13013 1223467 6153699-706

## CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |          |      |        |              |                          |                            |                         |                                                              |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     | Other Instructions and Notes                |                |                      |                     |                        |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|--------------|--------------------------|----------------------------|-------------------------|--------------------------------------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|------------------------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|----------------------|--------------------------|-----------------------|--------------------|------------------------|---------------------|---------------------------------------------|----------------|----------------------|---------------------|------------------------|--|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |          |      |        |              |                          | VOCs/EPA 8260B             | 1,4-Dioxane EPA 8260S/M | SVOCs EPA 8270C & PAHs 8270 SIM                              | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082               | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **Hydrazine EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B |                                             | **pH EPA 9045C | **Alcohols EPA 8015B | **Glycols EPA 8015B | **Terphenyls EPA 8015B |  |  |
| SAMPLE NUMBER                                                                                                                                                             | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers |                            |                         |                                                              |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| SL-044-SASC-SB-9.0-10.0                                                                                                                                                   | 12.01.10 | 1150 | soil   | none         | 2 - 16 oz. jars          |                            |                         | X                                                            |                   |                        | X                            | X                     | X                   | X                            | X                       | X                      |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| SL-044-SASC-SB-9.0-10.0                                                                                                                                                   | 12.01.10 | 1150 | soil   | none         | 1 - 16 oz. jar           |                            |                         |                                                              |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          | X                    | X                        |                       |                    | X                      | X                   | X                                           |                |                      |                     |                        |  |  |
| SL-044-SASC-SB-9.0-10.0                                                                                                                                                   | 12.01.10 | 1150 | soil   | none         | 3 - 4 oz. jars           |                            |                         |                                                              |                   | X                      |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             | X              | X                    |                     |                        |  |  |
| SL-044-SASC-SB-9.0-10.0                                                                                                                                                   | 12.01.10 | 1150 | soil   | none         | 1 - 4 oz. amber jar      |                            |                         |                                                              |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          | X                     |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| TB-113010                                                                                                                                                                 | 12.01.10 | 1330 | water  | HCl          | 4 - 40 ml vials          | X                          | X                       | X                                                            |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| SL-044-SASC-SB-4.5                                                                                                                                                        | 12.01.10 | 1143 | soil   | none         | 5 encore samplers        | X                          | X                       | X                                                            |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| SL-046-SASC-SB-4.5                                                                                                                                                        | 12.01.10 | 1015 | soil   | none         | 5 encore samplers        | X                          | X                       | X                                                            |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| SL-045-SASC-SB-4.5                                                                                                                                                        | 12.01.10 | 1412 | soil   | none         | 4 encore samplers        | X                          | X                       |                                                              |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| SL-047-SASC-SB-4.5                                                                                                                                                        | 12.01.10 | 1525 | soil   | none         | 4 encore samplers        | X                          | X                       |                                                              |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| SL-045-SASC-SB-8.0-9.0                                                                                                                                                    | 12.01.10 | 1422 | soil   | none         | 2 - 16 oz. jars          |                            |                         | X                                                            |                   |                        | X                            | X                     | X                   | X                            | X                       | X                      |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| SL-045-SASC-SB-4.0-5.0                                                                                                                                                    | 12.01.10 | 1418 | soil   | none         | 2 - 16 oz. jars          |                            |                         | X                                                            |                   |                        | X                            | X                     | X                   | X                            | X                       | X                      |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| SL-047-SASC-SB-4.0-5.0                                                                                                                                                    | 12.01.10 | 1529 | soil   | none         | 2 - 16 oz. jars          |                            |                         | X                                                            |                   |                        | X                            | X                     | X                   | X                            | X                       | X                      |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| Shelley Samantoni<br>12/11/10                                                                                                                                             |          |      |        |              |                          |                            |                         |                                                              |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     |                        |  |  |
| Relinquished by: (Signature)<br>Shelley Samantoni                                                                                                                         |          |      |        |              |                          | Date/Time<br>12.01.10 1630 |                         | Received for Laboratory by: (Signature)<br>Shelley Samantoni |                   |                        |                              |                       |                     | Date/Time<br>12/1/10 0915    |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     | Laboratory:<br>Lancaster Laboratories, Inc. |                |                      |                     |                        |  |  |
| Received by: (Signature)<br>FedEx                                                                                                                                         |          |      |        |              |                          | Date/Time                  |                         | Airbill No.<br>00732992                                      |                   |                        |                              |                       |                     | Tracking Number 869514319240 |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                                             |                |                      |                     | Cooler 2<br>1.2°C      |  |  |

# Explanation of Symbols and Abbreviations

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

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | 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.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | 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. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | 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 |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | Correlation coefficient for MSA $<0.995$                |

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

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

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

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

**ANALYTICAL RESULTS**

Prepared by:

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

Prepared for:

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

January 12, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/03/2010

Group Number: 1223724

SDG: DX012

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample DescriptionSL-037-SA5C-SB-3.5-4.5 Soil  
SL-037-SA5C-SB-3.5-4.5MS Soil  
SL-037-SA5C-SB-3.5-4.5MSD Soil  
SL-039-SA5C-SB-4.0-5.0 Soil  
SL-036-SA5C-SB-4.0-5.0 Soil  
DUP10-SA5C-QC-120210 Soil  
SL-040-SA5C-SB-4.0-5.0 Soil  
SL-040-SA5C-SB-9.0-10.0 SoilLancaster Labs (LLI) #6154853  
6154854  
6154855  
6154856  
6154857  
6154858  
6154859  
6154860

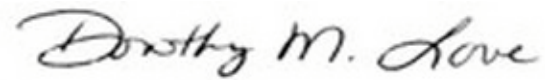
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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,



Dorothy M. Love  
Group Leader



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-037-SA5C-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154853  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09BKG

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 12.4       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-037-SA5C-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154853  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0377 JBQ   | 0.0140       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0583 JBQ   | 0.0174       | 5.71         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0477 JBQ   | 0.0168       | 5.71         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0391 JBQ   | 0.0176       | 5.71         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0677 JB    | 0.0172       | 5.71         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.182 JB     | 0.0193       | 5.71         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.603 JB     | 0.0253       | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0241 JB    | 0.0135       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0461 JB    | 0.00925      | 5.71         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0935 JB    | 0.00890      | 5.71         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0503 JBQ   | 0.0134       | 5.71         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0531 JB    | 0.0122       | 5.71         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0764 JBQ   | 0.0152       | 5.71         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0812 JB    | 0.0129       | 5.71         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.260 JB     | 0.0104       | 5.71         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0802 JBQ   | 0.0146       | 5.71         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.237 JBQ    | 0.0191       | 11.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 82   | 25 - 164 |
| 13C12-12378-PeCDD     | 88   | 25 - 181 |
| 13C12-123478-HxCDD    | 79   | 32 - 141 |
| 13C12-123678-HxCDD    | 74   | 28 - 130 |
| 13C12-123789-HxCDD    | 78   | 28 - 130 |
| 13C12-1234678-HpCDD   | 74   | 23 - 140 |
| 13C12-OCDD            | 61   | 17 - 157 |
| 13C12-2378-TCDF       | 78   | 24 - 169 |
| 13C12-12378-PeCDF     | 88   | 24 - 185 |
| 13C12-23478-PeCDF     | 86   | 21 - 178 |
| 13C12-123478-HxCDF    | 76   | 26 - 152 |
| 13C12-123678-HxCDF    | 78   | 26 - 123 |
| 13C12-234678-HxCDF    | 76   | 28 - 136 |
| 13C12-123789-HxCDF    | 73   | 29 - 147 |
| 13C12-1234678-HpCDF   | 82   | 28 - 143 |
| 13C12-1234789-HpCDF   | 65   | 26 - 138 |
| 13C12-OCDF            | 52   | 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



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-037-SA5C-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154853  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09BKG

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

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



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-037-SA5C-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154853  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09BKG

## 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      | 10347001     | 12/21/2010 01:15       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 4      | 10350162401A | 12/16/2010 09:20       | William C Schwebel | 1               |

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



# Analysis Report

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

Page 1 of 4

**Sample Description:** SL-037-SA5C-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154854  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09MS

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 12.4       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-037-SA5C-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154854  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.9         | B            | 0.0398       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 111          | B            | 0.0417       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 116          | B            | 0.0469       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 112          | B            | 0.0470       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 114          | B            | 0.0486       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 113          | B            | 0.0465       | 1               |
| 11031                 | OCDD          | 3268-87-9        | 229          | B            | 0.0693       | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 22.3         | B            | 0.0447       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 112          | B            | 0.0307       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 112          | B            | 0.0282       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 112          | B            | 0.0576       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 109          | B            | 0.0508       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 114          | B            | 0.0678       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 112          | B            | 0.0542       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 110          | B            | 0.0462       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 115          | B            | 0.0674       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 225          | B            | 0.0678       | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 86   | 25 - 164 |
| 13C12-12378-PeCDD     | 121  | 25 - 181 |
| 13C12-123478-HxCDD    | 79   | 32 - 141 |
| 13C12-123678-HxCDD    | 78   | 28 - 130 |
| 13C12-123789-HxCDD    | 77   | 28 - 130 |
| 13C12-1234678-HpCDD   | 75   | 23 - 140 |
| 13C12-OCDD            | 63   | 17 - 157 |
| 13C12-2378-TCDF       | 75   | 24 - 169 |
| 13C12-12378-PeCDF     | 113  | 24 - 185 |
| 13C12-23478-PeCDF     | 113  | 21 - 178 |
| 13C12-123478-HxCDF    | 76   | 26 - 152 |
| 13C12-123678-HxCDF    | 79   | 26 - 123 |
| 13C12-234678-HxCDF    | 76   | 28 - 136 |
| 13C12-123789-HxCDF    | 68   | 29 - 147 |
| 13C12-1234678-HpCDF   | 84   | 28 - 143 |
| 13C12-1234789-HpCDF   | 65   | 26 - 138 |
| 13C12-OCDF            | 55   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 92   | 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-037-SA5C-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154854  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09MS

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

**Sample Description:** SL-037-SA5C-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154854  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09MS

## 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      | 10347001     | 12/21/2010 02:12       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 4      | 10350162401A | 12/16/2010 09:20       | William C Schwebel | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-037-SA5C-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154855  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09MSD

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 12.4       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-037-SA5C-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154855  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.4         | B            | 0.0243       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 113          | B            | 0.0324       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 115          | B            | 0.0509       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 112          | B            | 0.0503       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 112          | B            | 0.0515       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 112          | B            | 0.0485       | 1               |
| 11031                 | OCDD          | 3268-87-9        | 227          | B            | 0.0511       | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 22.0         | B            | 0.0237       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 112          | B            | 0.0259       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 112          | B            | 0.0249       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 111          | B            | 0.0739       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 111          | B            | 0.0703       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 110          | B            | 0.0767       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 109          | B            | 0.0709       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 109          | B            | 0.0369       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 114          | B            | 0.0529       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 223          | B            | 0.0410       | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 81   | 25 - 164 |
| 13C12-12378-PeCDD     | 89   | 25 - 181 |
| 13C12-123478-HxCDD    | 76   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 70   | 23 - 140 |
| 13C12-OCDD            | 56   | 17 - 157 |
| 13C12-2378-TCDF       | 75   | 24 - 169 |
| 13C12-12378-PeCDF     | 90   | 24 - 185 |
| 13C12-23478-PeCDF     | 88   | 21 - 178 |
| 13C12-123478-HxCDF    | 73   | 26 - 152 |
| 13C12-123678-HxCDF    | 73   | 26 - 123 |
| 13C12-234678-HxCDF    | 74   | 28 - 136 |
| 13C12-123789-HxCDF    | 78   | 29 - 147 |
| 13C12-1234678-HpCDF   | 77   | 28 - 143 |
| 13C12-1234789-HpCDF   | 62   | 26 - 138 |
| 13C12-OCDF            | 50   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 89   | 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-037-SA5C-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154855  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09MSD

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



# Analysis Report

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**Sample Description:** SL-037-SA5C-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA5C-SB-3.5-4.5

LLI Sample # SW 6154855  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:47 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3735 SDG#: DX012-09MSD

## 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      | 10347001     | 12/21/2010 03:08       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 4      | 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:** SL-039-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA5C-SB-4.0-5.0

LLI Sample # SW 6154856  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 14:49 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3945 SDG#: DX012-10

| CAT No.                   | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                               |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                               |            |            |                             |                           |                 |
| 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-039-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA5C-SB-4.0-5.0

LLI Sample # SW 6154856  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 14:49 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3945 SDG#: DX012-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0329 JBQ   | 0.0154       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.112 JBQ    | 0.0165       | 5.39         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0414 JBQ   | 0.0141       | 5.39         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0627 JBQ   | 0.0148       | 5.39         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0785 JB    | 0.0142       | 5.39         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.175 JBQ    | 0.0155       | 5.39         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.446 JB     | 0.0234       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0202 JBQ   | 0.0137       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.100 JB     | 0.0115       | 5.39         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.115 JB     | 0.00991      | 5.39         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0787 JBQ   | 0.0140       | 5.39         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0826 JBQ   | 0.0134       | 5.39         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.104 JBQ    | 0.0155       | 5.39         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0987 JB    | 0.0137       | 5.39         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.308 JB     | 0.0105       | 5.39         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0902 JBQ   | 0.0141       | 5.39         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.275 JBQ    | 0.0181       | 10.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 72   | 25 - 164 |
| 13C12-12378-PeCDD     | 95   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 70   | 28 - 130 |
| 13C12-123789-HxCDD    | 72   | 28 - 130 |
| 13C12-1234678-HpCDD   | 70   | 23 - 140 |
| 13C12-OCDD            | 59   | 17 - 157 |
| 13C12-2378-TCDF       | 71   | 24 - 169 |
| 13C12-12378-PeCDF     | 89   | 24 - 185 |
| 13C12-23478-PeCDF     | 92   | 21 - 178 |
| 13C12-123478-HxCDF    | 72   | 26 - 152 |
| 13C12-123678-HxCDF    | 72   | 26 - 123 |
| 13C12-234678-HxCDF    | 72   | 28 - 136 |
| 13C12-123789-HxCDF    | 71   | 29 - 147 |
| 13C12-1234678-HpCDF   | 75   | 28 - 143 |
| 13C12-1234789-HpCDF   | 63   | 26 - 138 |
| 13C12-OCDF            | 52   | 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-039-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6154856  
**LLI Group #** 1223724  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/02/2010 14:49 by PH

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

**Submitted:** 12/03/2010 09:10

**Reported:** 01/12/2011 20:19

D3945 SDG#: DX012-10

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

**Sample Description:** SL-039-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA5C-SB-4.0-5.0

LLI Sample # SW 6154856  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 14:49 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3945 SDG#: DX012-10

## 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      | 10347001     | 12/21/2010 04:05       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 2      | 10347162401A | 12/14/2010 05:05       | William C Schwebel | 1               |



# Analysis Report

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**Sample Description:** SL-036-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA5C-SB-4.0-5.0

LLI Sample # SW 6154857  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 16:10 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3645 SDG#: DX012-11

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 13.0       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-036-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA5C-SB-4.0-5.0

LLI Sample # SW 6154857  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 16:10 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3645 SDG#: DX012-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0402 JB    | 0.0221       | 1.15         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0260 JBQ   | 0.0197       | 5.75         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0319 JB    | 0.0183       | 5.75         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0318 JBQ   | 0.0183       | 5.75         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0350 JBQ   | 0.0182       | 5.75         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.171 JBQ    | 0.0222       | 5.75         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.363 JBQ    | 0.0308       | 11.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0177 U     | 0.0177       | 1.15         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0390 JB    | 0.0131       | 5.75         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0664 JBQ   | 0.0110       | 5.75         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0606 JBQ   | 0.0128       | 5.75         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0331 JBQ   | 0.0122       | 5.75         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0919 JBQ   | 0.0143       | 5.75         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0793 JB    | 0.0123       | 5.75         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.263 JB     | 0.0102       | 5.75         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0828 JB    | 0.0144       | 5.75         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.205 JB     | 0.0276       | 11.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 69   | 25 - 164 |
| 13C12-12378-PeCDD     | 94   | 25 - 181 |
| 13C12-123478-HxCDD    | 69   | 32 - 141 |
| 13C12-123678-HxCDD    | 65   | 28 - 130 |
| 13C12-123789-HxCDD    | 66   | 28 - 130 |
| 13C12-1234678-HpCDD   | 63   | 23 - 140 |
| 13C12-OCDD            | 51   | 17 - 157 |
| 13C12-2378-TCDF       | 69   | 24 - 169 |
| 13C12-12378-PeCDF     | 87   | 24 - 185 |
| 13C12-23478-PeCDF     | 91   | 21 - 178 |
| 13C12-123478-HxCDF    | 70   | 26 - 152 |
| 13C12-123678-HxCDF    | 69   | 26 - 123 |
| 13C12-234678-HxCDF    | 69   | 28 - 136 |
| 13C12-123789-HxCDF    | 68   | 29 - 147 |
| 13C12-1234678-HpCDF   | 69   | 28 - 143 |
| 13C12-1234789-HpCDF   | 59   | 26 - 138 |
| 13C12-OCDF            | 45   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 82   | 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-036-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA5C-SB-4.0-5.0

LLI Sample # SW 6154857  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 16:10 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D3645 SDG#: DX012-11

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

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

**Sample Description:** SL-036-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6154857  
**LLI Group #** 1223724  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/02/2010 16:10 by PH

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

**Submitted:** 12/03/2010 09:10

**Reported:** 01/12/2011 20:19

D3645 SDG#: DX012-11

## 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      | 10347001     | 12/21/2010 05:02       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10342162401B | 12/08/2010 11:42       | William C Schwebel | 1               |



# Analysis Report

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**Sample Description:** DUP10-SA5C-QC-120210 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP10-SA5C-QC-120210

LLI Sample # SW 6154858  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:42 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

DDP10 SDG#: DX012-12FD

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 21.9       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** DUP10-SA5C-QC-120210 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP10-SA5C-QC-120210

**LLI Sample #** SW 6154858  
**LLI Group #** 1223724  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:42 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

DDP10 SDG#: DX012-12FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0703 JBQ   | 0.0227       | 1.28         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0605 JBQ   | 0.0198       | 6.40         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0336 JBQ   | 0.0205       | 6.40         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0499 JB    | 0.0215       | 6.40         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0523 JBQ   | 0.0211       | 6.40         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.250 JBQ    | 0.0219       | 6.40         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.404 JB     | 0.0301       | 12.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0152 U     | 0.0152       | 1.28         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0484 JBQ   | 0.0128       | 6.40         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0981 JB    | 0.0122       | 6.40         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0875 JBQ   | 0.0156       | 6.40         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0539 JBQ   | 0.0143       | 6.40         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.124 JBQ    | 0.0163       | 6.40         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0932 JBQ   | 0.0147       | 6.40         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.309 JB     | 0.0117       | 6.40         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0931 JB    | 0.0161       | 6.40         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.287 JB     | 0.0243       | 12.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 69   | 25 - 164 |
| 13C12-12378-PeCDD     | 84   | 25 - 181 |
| 13C12-123478-HxCDD    | 69   | 32 - 141 |
| 13C12-123678-HxCDD    | 66   | 28 - 130 |
| 13C12-123789-HxCDD    | 67   | 28 - 130 |
| 13C12-1234678-HpCDD   | 64   | 23 - 140 |
| 13C12-OCDD            | 51   | 17 - 157 |
| 13C12-2378-TCDF       | 68   | 24 - 169 |
| 13C12-12378-PeCDF     | 81   | 24 - 185 |
| 13C12-23478-PeCDF     | 83   | 21 - 178 |
| 13C12-123478-HxCDF    | 65   | 26 - 152 |
| 13C12-123678-HxCDF    | 68   | 26 - 123 |
| 13C12-234678-HxCDF    | 67   | 28 - 136 |
| 13C12-123789-HxCDF    | 68   | 29 - 147 |
| 13C12-1234678-HpCDF   | 70   | 28 - 143 |
| 13C12-1234789-HpCDF   | 57   | 26 - 138 |
| 13C12-OCDF            | 44   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 82   | 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:** **DUP10-SA5C-QC-120210 Soil**  
**SSFL Area IV Collocated Soil Sampling**  
**DUP10-SA5C-QC-120210**

**LLI Sample # SW 6154858**  
**LLI Group # 1223724**  
**Account # 13013**

**Project Name: SSFL Area IV Collocated Soil Sampling**

Collected: 12/02/2010 09:42 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

DDP10 SDG#: DX012-12FD

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

**Sample Description:** DUP10-SA5C-QC-120210 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP10-SA5C-QC-120210

LLI Sample # SW 6154858  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 09:42 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

DDP10 SDG#: DX012-12FD

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### General Sample Comments

State of California Lab Certification No. 2501

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

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### 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      | 10347001     | 12/21/2010 10:54       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 2      | 10347162401A | 12/14/2010 05:05       | William C Schwebel | 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-040-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5C-SB-4.0-5.0

LLI Sample # SW 6154859  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 12:19 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D4045 SDG#: DX012-13

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 12.2       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-040-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6154859  
**LLI Group #** 1223724  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/02/2010 12:19 by PH

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

**Submitted:** 12/03/2010 09:10

**Reported:** 01/12/2011 20:19

D4045 SDG#: DX012-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0280 JBQ   | 0.0237       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0428 JBQ   | 0.0251       | 5.69         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0300 JBQ   | 0.0165       | 5.69         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0233 JBQ   | 0.0163       | 5.69         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0225 JBQ   | 0.0165       | 5.69         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.146 JB     | 0.0218       | 5.69         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.313 JBQ    | 0.0244       | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0175 U     | 0.0175       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0158 JBQ   | 0.0154       | 5.69         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0617 JBQ   | 0.0138       | 5.69         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0384 JBQ   | 0.0117       | 5.69         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0319 JB    | 0.0114       | 5.69         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0782 JBQ   | 0.0134       | 5.69         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0663 JBQ   | 0.0113       | 5.69         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.126 JBQ    | 0.00877      | 5.69         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0460 JBQ   | 0.0120       | 5.69         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.142 JB     | 0.0248       | 11.4         | 1               |

| <b>Labeled Compounds</b> | <b>%Rec</b> | <b>Windows</b> |
|--------------------------|-------------|----------------|
| 13C12-2378-TCDD          | 65          | 25 - 164       |
| 13C12-12378-PeCDD        | 82          | 25 - 181       |
| 13C12-123478-HxCDD       | 77          | 32 - 141       |
| 13C12-123678-HxCDD       | 73          | 28 - 130       |
| 13C12-123789-HxCDD       | 73          | 28 - 130       |
| 13C12-1234678-HpCDD      | 75          | 23 - 140       |
| 13C12-OCDD               | 67          | 17 - 157       |
| 13C12-2378-TCDF          | 69          | 24 - 169       |
| 13C12-12378-PeCDF        | 78          | 24 - 185       |
| 13C12-23478-PeCDF        | 79          | 21 - 178       |
| 13C12-123478-HxCDF       | 72          | 26 - 152       |
| 13C12-123678-HxCDF       | 72          | 26 - 123       |
| 13C12-234678-HxCDF       | 72          | 28 - 136       |
| 13C12-123789-HxCDF       | 67          | 29 - 147       |
| 13C12-1234678-HpCDF      | 79          | 28 - 143       |
| 13C12-1234789-HpCDF      | 68          | 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-040-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5C-SB-4.0-5.0

LLI Sample # SW 6154859  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 12:19 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D4045 SDG#: DX012-13

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



# Analysis Report

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**Sample Description:** SL-040-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5C-SB-4.0-5.0

LLI Sample # SW 6154859  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 12:19 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D4045 SDG#: DX012-13

## 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      | 10349002     | 12/18/2010 07:17       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10342162401B | 12/08/2010 11:42       | William C Schwebel | 1               |

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



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-040-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5C-SB-9.0-10.0

LLI Sample # SW 6154860  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 12:26 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D4091 SDG#: DX012-14\*

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 13.2       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-040-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5C-SB-9.0-10.0

LLI Sample # SW 6154860  
LLI Group # 1223724  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/02/2010 12:26 by PH

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

Submitted: 12/03/2010 09:10

Reported: 01/12/2011 20:19

D4091 SDG#: DX012-14\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0175 JBQ   | 0.0153       | 1.15         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0304 JBQ   | 0.0214       | 5.76         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0378 JBQ   | 0.0142       | 5.76         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0520 JBQ   | 0.0146       | 5.76         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0430 JBQ   | 0.0145       | 5.76         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.162 JB     | 0.0207       | 5.76         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.310 JBQ    | 0.0281       | 11.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0210 JBQ   | 0.0162       | 1.15         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0376 JBQ   | 0.0115       | 5.76         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0653 JBQ   | 0.0103       | 5.76         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0652 JB    | 0.0150       | 5.76         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0465 JB    | 0.0139       | 5.76         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0786 JB    | 0.0157       | 5.76         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.109 JBQ    | 0.0145       | 5.76         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.265 JBQ    | 0.0122       | 5.76         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0831 JBQ   | 0.0169       | 5.76         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.204 JBQ    | 0.0244       | 11.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 72   | 25 - 164 |
| 13C12-12378-PeCDD     | 86   | 25 - 181 |
| 13C12-123478-HxCDD    | 72   | 32 - 141 |
| 13C12-123678-HxCDD    | 70   | 28 - 130 |
| 13C12-123789-HxCDD    | 70   | 28 - 130 |
| 13C12-1234678-HpCDD   | 65   | 23 - 140 |
| 13C12-OCDD            | 53   | 17 - 157 |
| 13C12-2378-TCDF       | 71   | 24 - 169 |
| 13C12-12378-PeCDF     | 82   | 24 - 185 |
| 13C12-23478-PeCDF     | 86   | 21 - 178 |
| 13C12-123478-HxCDF    | 71   | 26 - 152 |
| 13C12-123678-HxCDF    | 71   | 26 - 123 |
| 13C12-234678-HxCDF    | 71   | 28 - 136 |
| 13C12-123789-HxCDF    | 72   | 29 - 147 |
| 13C12-1234678-HpCDF   | 72   | 28 - 143 |
| 13C12-1234789-HpCDF   | 60   | 26 - 138 |
| 13C12-OCDF            | 48   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 82   | 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-040-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6154860  
**LLI Group #** 1223724  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/02/2010 12:26 by PH

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

**Submitted:** 12/03/2010 09:10

**Reported:** 01/12/2011 20:19

D4091 SDG#: DX012-14\*

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

**Sample Description:** SL-040-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6154860  
**LLI Group #** 1223724  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/02/2010 12:26 by PH

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

**Submitted:** 12/03/2010 09:10

**Reported:** 01/12/2011 20:19

D4091 SDG#: DX012-14\*

## 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      | 10347001     | 12/21/2010 11:51       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10347001     | 12/13/2010 15:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10342162401B | 12/08/2010 11:42       | William C Schwebel | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 01/12/11 at 08:19 PM

Group Number: 1223724

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: 10342162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6154857, 6154859-6154860 |             |           |              | 100      |           | 80-120          |     |         |
| Batch number: 10347162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6154856, 6154858         |             |           |              | 100      |           | 80-120          |     |         |
| Batch number: 10350162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6154853-6154855          |             |           |              | 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: 10347001 | Sample number(s): 6154853-6154858, 6154860 |             |           |              |          |           |                 |     |         |
| 2378-TCDD              | 0.0140 J                                   | 0.0113      | 1.00      | ng/kg        | 96       |           | 67-158          |     |         |
| 12378-PeCDD            | 0.0265 J                                   | 0.0138      | 5.00      | ng/kg        | 98       |           | 70-142          |     |         |
| 123478-HxCDD           | 0.0197 J                                   | 0.0114      | 5.00      | ng/kg        | 102      |           | 70-164          |     |         |
| 123678-HxCDD           | 0.0273 J                                   | 0.0117      | 5.00      | ng/kg        | 99       |           | 76-134          |     |         |
| 123789-HxCDD           | 0.0160 J                                   | 0.0114      | 5.00      | ng/kg        | 100      |           | 64-162          |     |         |
| 1234678-HpCDD          | 0.126 J                                    | 0.0158      | 5.00      | ng/kg        | 100      |           | 70-140          |     |         |
| OCDD                   | 0.227 J                                    | 0.0214      | 10.0      | ng/kg        | 100      |           | 78-144          |     |         |
| 2378-TCDF              | 0.0210 J                                   | 0.0114      | 1.00      | ng/kg        | 101      |           | 75-158          |     |         |
| 12378-PeCDF            | 0.0411 J                                   | 0.00830     | 5.00      | ng/kg        | 98       |           | 80-134          |     |         |
| 23478-PeCDF            | 0.0683 J                                   | 0.00790     | 5.00      | ng/kg        | 99       |           | 68-160          |     |         |
| 123478-HxCDF           | 0.0608 J                                   | 0.0111      | 5.00      | ng/kg        | 95       |           | 72-134          |     |         |
| 123678-HxCDF           | 0.0469 J                                   | 0.0100      | 5.00      | ng/kg        | 93       |           | 84-130          |     |         |
| 123789-HxCDF           | 0.0780 J                                   | 0.0116      | 5.00      | ng/kg        | 98       |           | 78-130          |     |         |
| 234678-HxCDF           | 0.0717 J                                   | 0.0104      | 5.00      | ng/kg        | 97       |           | 70-156          |     |         |
| 1234678-HpCDF          | 0.213 J                                    | 0.00770     | 5.00      | ng/kg        | 97       |           | 82-122          |     |         |
| 1234789-HpCDF          | 0.0802 J                                   | 0.0114      | 5.00      | ng/kg        | 99       |           | 78-138          |     |         |
| OCDF                   | 0.195 J                                    | 0.0198      | 10.0      | ng/kg        | 98       |           | 63-170          |     |         |
| Batch number: 10349002 | Sample number(s): 6154859                  |             |           |              |          |           |                 |     |         |
| 2378-TCDD              | 0.0213 J                                   | 0.0107      | 1.00      | ng/kg        | 97       |           | 67-158          |     |         |
| 12378-PeCDD            | 0.0359 J                                   | 0.0168      | 5.00      | ng/kg        | 100      |           | 70-142          |     |         |
| 123478-HxCDD           | 0.0243 J                                   | 0.0119      | 5.00      | ng/kg        | 102      |           | 70-164          |     |         |
| 123678-HxCDD           | 0.0229 J                                   | 0.0123      | 5.00      | ng/kg        | 101      |           | 76-134          |     |         |
| 123789-HxCDD           | 0.0240 J                                   | 0.0118      | 5.00      | ng/kg        | 101      |           | 64-162          |     |         |
| 1234678-HpCDD          | 0.0999 J                                   | 0.0140      | 5.00      | ng/kg        | 103      |           | 70-140          |     |         |
| OCDD                   | 0.159 J                                    | 0.0186      | 10.0      | ng/kg        | 102      |           | 78-144          |     |         |
| 2378-TCDF              | 0.0151 J                                   | 0.0118      | 1.00      | ng/kg        | 103      |           | 75-158          |     |         |
| 12378-PeCDF            | 0.0422 J                                   | 0.00930     | 5.00      | ng/kg        | 101      |           | 80-134          |     |         |
| 23478-PeCDF            | 0.0850 J                                   | 0.00910     | 5.00      | ng/kg        | 99       |           | 68-160          |     |         |
| 123478-HxCDF           | 0.0438 J                                   | 0.00940     | 5.00      | ng/kg        | 100      |           | 72-134          |     |         |
| 123678-HxCDF           | 0.0318 J                                   | 0.00870     | 5.00      | ng/kg        | 96       |           | 84-130          |     |         |
| 123789-HxCDF           | 0.0737 J                                   | 0.0101      | 5.00      | ng/kg        | 101      |           | 78-130          |     |         |
| 234678-HxCDF           | 0.0534 J                                   | 0.00920     | 5.00      | ng/kg        | 100      |           | 70-156          |     |         |

\*- 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: 01/12/11 at 08:19 PM

Group Number: 1223724

| Analysis Name | Blank Result | Blank EDL** | Blank MRL | Report Units | OPR %REC | OPRD %REC | OPR/OPRD Limits | RPD | RPD Max |
|---------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| 1234678-HpCDF | 0.144 J      | 0.00710     | 5.00      | ng/kg        | 100      |           | 82-122          |     |         |
| 1234789-HpCDF | 0.0527 J     | 0.00990     | 5.00      | ng/kg        | 102      |           | 78-138          |     |         |
| OCDF          | 0.177 J      | 0.0195      | 10.0      | ng/kg        | 102      |           | 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: 10342162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6154857, 6154859-6154860 BKG: P154848<br>13.0 12.0 8 20 |          |               |     |         |          |          |         |             |
| Batch number: 10347162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6154856, 6154858 BKG: P154843<br>21.9 30.1 32* 20       |          |               |     |         |          |          |         |             |
| Batch number: 10350162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6154853-6154855 BKG: P154843<br>12.4 13.1 6 20          |          |               |     |         |          |          |         |             |
| Batch number: 10347001                                      | Sample number(s): 6154853-6154858, 6154860 UNSPK: 6154853                 |          |               |     |         |          |          |         |             |
| 2378-TCDD                                                   | 96                                                                        | 94       | 67-158        | 2   | 25      |          |          |         |             |
| 12378-PeCDD                                                 | 97                                                                        | 99       | 70-142        | 1   | 25      |          |          |         |             |
| 123478-HxCDD                                                | 102                                                                       | 100      | 70-164        | 2   | 25      |          |          |         |             |
| 123678-HxCDD                                                | 98                                                                        | 98       | 76-134        | 0   | 25      |          |          |         |             |
| 123789-HxCDD                                                | 100                                                                       | 98       | 64-162        | 1   | 25      |          |          |         |             |
| 1234678-HpCDD                                               | 99                                                                        | 98       | 70-140        | 1   | 25      |          |          |         |             |
| OCDD                                                        | 100                                                                       | 99       | 78-144        | 1   | 25      |          |          |         |             |
| 2378-TCDF                                                   | 98                                                                        | 96       | 75-158        | 1   | 25      |          |          |         |             |
| 12378-PeCDF                                                 | 98                                                                        | 98       | 80-134        | 0   | 25      |          |          |         |             |
| 23478-PeCDF                                                 | 98                                                                        | 98       | 68-160        | 0   | 25      |          |          |         |             |
| 123478-HxCDF                                                | 98                                                                        | 97       | 72-134        | 1   | 25      |          |          |         |             |
| 123678-HxCDF                                                | 96                                                                        | 97       | 84-130        | 1   | 25      |          |          |         |             |
| 123789-HxCDF                                                | 100                                                                       | 97       | 78-130        | 3   | 25      |          |          |         |             |
| 234678-HxCDF                                                | 98                                                                        | 95       | 70-156        | 2   | 25      |          |          |         |             |
| 1234678-HpCDF                                               | 96                                                                        | 96       | 82-122        | 1   | 25      |          |          |         |             |
| 1234789-HpCDF                                               | 101                                                                       | 100      | 78-138        | 1   | 25      |          |          |         |             |
| OCDF                                                        | 99                                                                        | 98       | 63-170        | 1   | 25      |          |          |         |             |
| Batch number: 10349002                                      | Sample number(s): 6154859 UNSPK: P156156                                  |          |               |     |         |          |          |         |             |
| 2378-TCDD                                                   | 96                                                                        | 97       | 67-158        | 1   | 25      |          |          |         |             |
| 12378-PeCDD                                                 | 99                                                                        | 100      | 70-142        | 0   | 25      |          |          |         |             |
| 123478-HxCDD                                                | 100                                                                       | 102      | 70-164        | 2   | 25      |          |          |         |             |
| 123678-HxCDD                                                | 99                                                                        | 100      | 76-134        | 1   | 25      |          |          |         |             |
| 123789-HxCDD                                                | 99                                                                        | 99       | 64-162        | 0   | 25      |          |          |         |             |
| 1234678-HpCDD                                               | 99                                                                        | 100      | 70-140        | 1   | 25      |          |          |         |             |
| OCDD                                                        | 98                                                                        | 96       | 78-144        | 2   | 25      |          |          |         |             |
| 2378-TCDF                                                   | 97                                                                        | 98       | 75-158        | 1   | 25      |          |          |         |             |
| 12378-PeCDF                                                 | 98                                                                        | 100      | 80-134        | 2   | 25      |          |          |         |             |
| 23478-PeCDF                                                 | 99                                                                        | 99       | 68-160        | 1   | 25      |          |          |         |             |
| 123478-HxCDF                                                | 98                                                                        | 97       | 72-134        | 1   | 25      |          |          |         |             |
| 123678-HxCDF                                                | 98                                                                        | 99       | 84-130        | 1   | 25      |          |          |         |             |
| 123789-HxCDF                                                | 97                                                                        | 98       | 78-130        | 1   | 25      |          |          |         |             |
| 234678-HxCDF                                                | 99                                                                        | 100      | 70-156        | 1   | 25      |          |          |         |             |
| 1234678-HpCDF                                               | 97                                                                        | 97       | 82-122        | 0   | 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: 01/12/11 at 08:19 PM

Group Number: 1223724

### 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<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 1234789-HpCDF | 101        | 100         | 78-138           | 1   | 25         |             |             |            |                |
| OCDF          | 99         | 100         | 63-170           | 1   | 25         |             |             |            |                |

### Surrogate Quality Control

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

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 10347001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF  | 13C12-123678-HxCDF       | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|---------------------|--------------------------|--------------------|--------------------|
| 6154853 | 82                  | 86                  | 76                  | 78                       | 76                 | 73                 |
| 6154854 | 86                  | 113                 | 76                  | 79                       | 76                 | 68                 |
| 6154855 | 81                  | 88                  | 73                  | 73                       | 74                 | 78                 |
| 6154856 | 72                  | 92                  | 72                  | 72                       | 72                 | 71                 |
| 6154857 | 69                  | 91                  | 70                  | 69                       | 69                 | 68                 |
| 6154858 | 69                  | 83                  | 65                  | 68                       | 67                 | 68                 |
| 6154860 | 72                  | 86                  | 71                  | 71                       | 71                 | 72                 |
| Blank   | 75                  | 78                  | 73                  | 76                       | 74                 | 75                 |
| MS      | 86                  | 113                 | 76                  | 79                       | 76                 | 68                 |
| MSD     | 81                  | 88                  | 73                  | 73                       | 74                 | 78                 |
| OPR     | 73                  | 80                  | 69                  | 73                       | 68                 | 65                 |
| Limits: | 25-164              | 21-178              | 26-152              | 26-123                   | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF          | 13C12-1278-TCDD<br>(CRS) | 13C12-12378-PeCDD  | 13C12-123478-HxCDD |
| 6154853 | 82                  | 65                  | 52                  | 85                       | 88                 | 79                 |
| 6154854 | 84                  | 65                  | 55                  | 92                       | 121                | 79                 |
| 6154855 | 77                  | 62                  | 50                  | 89                       | 89                 | 76                 |
| 6154856 | 75                  | 63                  | 52                  | 84                       | 95                 | 75                 |
| 6154857 | 69                  | 59                  | 45                  | 82                       | 94                 | 69                 |
| 6154858 | 70                  | 57                  | 44                  | 82                       | 84                 | 69                 |
| 6154860 | 72                  | 60                  | 48                  | 82                       | 86                 | 72                 |
| Blank   | 82                  | 62                  | 49                  | 81                       | 80                 | 79                 |
| MS      | 84                  | 65                  | 55                  | 92                       | 121                | 79                 |
| MSD     | 77                  | 62                  | 50                  | 89                       | 89                 | 76                 |
| OPR     | 81                  | 60                  | 50                  | 82                       | 87                 | 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  |
| 6154853 | 74                  | 78                  | 74                  | 61                       | 78                 | 88                 |
| 6154854 | 78                  | 77                  | 75                  | 63                       | 75                 | 113                |
| 6154855 | 73                  | 74                  | 70                  | 56                       | 75                 | 90                 |
| 6154856 | 70                  | 72                  | 70                  | 59                       | 71                 | 89                 |
| 6154857 | 65                  | 66                  | 63                  | 51                       | 69                 | 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: 01/12/11 at 08:19 PM

Group Number: 1223724

### Surrogate Quality Control

|                                              |                     |                     |                     |                       |                    |                    |
|----------------------------------------------|---------------------|---------------------|---------------------|-----------------------|--------------------|--------------------|
| 6154858                                      | 66                  | 67                  | 64                  | 51                    | 68                 | 81                 |
| 6154860                                      | 70                  | 70                  | 65                  | 53                    | 71                 | 82                 |
| Blank                                        | 74                  | 76                  | 73                  | 59                    | 71                 | 82                 |
| MS                                           | 78                  | 77                  | 75                  | 63                    | 75                 | 113                |
| MSD                                          | 73                  | 74                  | 70                  | 56                    | 75                 | 90                 |
| OPR                                          | 72                  | 73                  | 73                  | 61                    | 69                 | 85                 |
| Limits:                                      | 28-130              | 28-130              | 23-140              | 17-157                | 24-169             | 24-185             |
| Analysis Name: 10a Dioxin/Furan by EPA 1613B |                     |                     |                     |                       |                    |                    |
| Batch number: 10349002                       |                     |                     |                     |                       |                    |                    |
|                                              | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF  | 13C12-123678-HxCDF    | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
| 6154859                                      | 65                  | 79                  | 72                  | 72                    | 72                 | 67                 |
| Blank                                        | 69                  | 73                  | 67                  | 69                    | 67                 | 65                 |
| MS                                           | 75                  | 84                  | 75                  | 74                    | 76                 | 80                 |
| MSD                                          | 61                  | 67                  | 63                  | 62                    | 62                 | 61                 |
| OPR                                          | 78                  | 81                  | 73                  | 77                    | 74                 | 74                 |
| 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 |
| 6154859                                      | 79                  | 68                  | 58                  | 77                    | 82                 | 77                 |
| Blank                                        | 77                  | 62                  | 52                  | 79                    | 76                 | 73                 |
| MS                                           | 81                  | 72                  | 61                  | 82                    | 87                 | 81                 |
| MSD                                          | 70                  | 59                  | 51                  | 67                    | 70                 | 66                 |
| OPR                                          | 85                  | 65                  | 54                  | 87                    | 88                 | 83                 |
| 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  |
| 6154859                                      | 73                  | 73                  | 75                  | 67                    | 69                 | 78                 |
| Blank                                        | 70                  | 71                  | 73                  | 63                    | 68                 | 75                 |
| MS                                           | 77                  | 80                  | 80                  | 69                    | 73                 | 84                 |
| MSD                                          | 62                  | 65                  | 67                  | 60                    | 61                 | 68                 |
| OPR                                          | 78                  | 80                  | 79                  | 69                    | 76                 | 85                 |
| 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.

615 4853-60

### CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |          |      |        |              |                          | CHAIN OF CUSTODY RECORD            |                        |                                                      |                   |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|--------------|--------------------------|------------------------------------|------------------------|------------------------------------------------------|-------------------|------------------------|------------------------------|--------------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|----------------------|--------------------------|-----------------------|--------------------|---------------------------------------------|---------------------|----------------|----------------------|---------------------|------------------------|------------------------------|------------|--------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |          |      |        |              |                          |                                    |                        |                                                      |                   |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
| Samplers: (Signature) <i>Pamela Hartman Shelly Samaitoni</i>                                                                                                              |          |      |        |              |                          |                                    |                        |                                                      |                   |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
| SAMPLE NUMBER                                                                                                                                                             | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers | VOCs/EPA 8260B                     | 1,4-Dioxane EPA 8260IM | SVOCs EPA 8270C & PAHs 8270 SIM                      | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/60208&7471A | *Hex Chrome EPA 7199*    | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0 | **Formaldehyde EPA 8313A | **Hydrazine EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A                      | **Cyanide EPA 9012B | **pH EPA 9045C | **Alcohols EPA 8015B | **Glycols EPA 8015B | **Terphenyls EPA 8015B | Other Instructions and Notes |            |        |
| DUP10-SA5C-QC-120210                                                                                                                                                      | 12.02.10 | 0942 | soil   | none         | 2 - 16 oz. jars          |                                    |                        | X                                                    |                   |                        | X                            | X                        | X                   | X              | X                       | X                      |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
| DUP10-SA5C-QC-120210                                                                                                                                                      | 12.02.10 | 0942 | soil   | none         | 1 - 16 oz. jar           |                                    |                        |                                                      |                   |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          | X                    | X                        |                       | X                  | X                                           | X                   | X              |                      |                     | X                      |                              |            |        |
| DUP10-SA5C-QC-120210                                                                                                                                                      | 12.02.10 | 0942 | soil   | none         | 3 - 4 oz. jars           |                                    |                        |                                                      |                   | X                      |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                | X                    | X                   |                        |                              |            |        |
| DUP10-SA5C-QC-120210                                                                                                                                                      | 12.02.10 | 0942 | soil   | none         | 1 - 4 oz. amber jar      |                                    |                        |                                                      |                   |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          | X                     |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
| TB-120210                                                                                                                                                                 | 12.02.10 | 1415 | water  | HCl          | 4 - 40 ml vials          | X                                  | X                      |                                                      | X                 |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              | Trip Blank |        |
| DUP10-SA5C-QC-120210                                                                                                                                                      | 12.02.10 | 0942 | soil   | none         | 5 encore samplers        | X                                  | X                      |                                                      | X                 |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
| SL-040-SA5C-SB-4.5                                                                                                                                                        | 12.02.10 | 1215 | soil   | none         | 4 encore samplers        | X                                  | X                      |                                                      |                   |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
| SL-037-SA5C-SB-4.0MS                                                                                                                                                      | 12.02.10 | 0938 | soil   | none         | 15 encore samplers       | X                                  | X                      |                                                      | X                 |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            | MS/MSD |
| SL-039-SA5C-SB-4.5                                                                                                                                                        | 12.02.10 | 1444 | soil   | none         | 5 encore samplers        | X                                  | X                      |                                                      | X                 |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
| SL-036-SA5C-SB-4.5                                                                                                                                                        | 12.02.10 | 1605 | soil   | none         | 4 encore samplers        | X                                  | X                      |                                                      |                   |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
| SL-040-SA5C-SB-9.0-10.0                                                                                                                                                   | 12.02.10 | 1226 | soil   | none         | 2 - 16 oz. jars          |                                    |                        | X                                                    |                   |                        | X                            | X                        | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
| SL-040-SA5C-SB-4.0-5.0                                                                                                                                                    | 12.02.10 | 1219 | soil   | none         | 2 - 16 oz. jars          |                                    |                        | X                                                    |                   |                        | X                            | X                        | X                   | X              | X                       | X                      |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
|                                                                                                                                                                           |          |      |        |              |                          | <i>Shelly Samaitoni</i><br>12/2/10 |                        |                                                      |                   |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
| Relinquished by: (Signature) <i>Shelly Samaitoni</i>                                                                                                                      |          |      |        |              |                          | Date/Time<br>12.02.10 1630         |                        | Received for Laboratory by: (Signature) <i>M. M.</i> |                   |                        |                              | Date/Time<br>12/3/10 910 |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    | Laboratory:<br>Lancaster Laboratories, Inc. |                     |                |                      |                     |                        |                              |            |        |
| Received by: (Signature) <i>FedEx</i>                                                                                                                                     |          |      |        |              |                          | Date/Time                          |                        | Airbill No.<br>00732992                              |                   |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          | Cooler 2              |                    |                                             |                     |                |                      |                     |                        |                              |            |        |
|                                                                                                                                                                           |          |      |        |              |                          |                                    |                        | Tracking Number 869514318461                         |                   |                        |                              |                          |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                                             |                     |                |                      |                     |                        |                              |            |        |

6154853-60

### CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |          |                            |        |                                                               |                          |                          | CHAIN OF CUSTODY RECORD |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------|--------|---------------------------------------------------------------|--------------------------|--------------------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|---------------------------------------------|--------------------------|-----------------------|--------------------|------------------------|---------------------|----------------|----------------------|---------------------|------------------------|------------------------------|--|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
| Samplers: (Signature) <i>Pamela Hartman Sully Samantoni</i>                                                                                                               |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
| SAMPLE NUMBER                                                                                                                                                             | DATE     | TIME                       | MATRIX | Preservative                                                  | Type & No. of Containers | VOCs/EPA 8260B           | 1,4-Dioxane EPA 8260B/M | SVOCs EPA 8270C & PAHs 8270 SIM | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0                        | **Formaldehyde EPA 8315A | **Hydrazine EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B | **pH EPA 9045C | **Alcohols EPA 8015B | **Glycols EPA 8015B | **Terphenyls EPA 8015B | Other instructions and Notes |  |  |
| SL-039-SASC-SB-4.0-5.0                                                                                                                                                    | 12.02.10 | 1449                       | soil   | none                                                          | 2 - 16 oz. jars          |                          |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
| SL-039-SASC-SB-4.0-5.0                                                                                                                                                    | 12.02.10 | 1449                       | soil   | none                                                          | 1 - 16 oz. jar           |                          |                         |                                 |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                                           |                                          | X                                           | X                        |                       | X                  | X                      | X                   | X              |                      |                     |                        | X                            |  |  |
| SL-039-SASC-SB-4.0-5.0                                                                                                                                                    | 12.02.10 | 1449                       | soil   | none                                                          | 3 - 4 oz. jars           |                          |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                | X                    | X                   |                        |                              |  |  |
| SL-036-SASC-SB-4.0-5.0                                                                                                                                                    | 12.02.10 | 1610                       | soil   | none                                                          | 2 - 16 oz. jars          |                          |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
| <div style="text-align: center;"> <i>Sully Samantoni</i><br/> 12/2/10 </div>                                                                                              |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|                                                                                                                                                                           |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|                                                                                                                                                                           |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|                                                                                                                                                                           |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|                                                                                                                                                                           |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|                                                                                                                                                                           |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|                                                                                                                                                                           |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|                                                                                                                                                                           |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|                                                                                                                                                                           |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|                                                                                                                                                                           |          |                            |        |                                                               |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
| Relinquished by: (Signature)<br><i>Sully Samantoni</i>                                                                                                                    |          | Date/Time<br>12.02.10 1630 |        | Received for Laboratory by: (Signature)<br><i>[Signature]</i> |                          | Date/Time<br>12/3/10 910 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          | Laboratory:<br>Lancaster Laboratories, Inc. |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
| Received by: (Signature)<br><i>FedEx</i>                                                                                                                                  |          | Date/Time                  |        | Airbill No.<br>00732992                                       |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          | Cooler 3                                    |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |
|                                                                                                                                                                           |          |                            |        | Tracking Number 869514318450                                  |                          |                          |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                                             |                          |                       |                    |                        |                     |                |                      |                     |                        |                              |  |  |

6154853-60

### CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                          |          |                            |        |                                                       |                          |                              | CHAIN OF CUSTODY RECORD |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     | Other Instructions and Notes |                |                      |                                             |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------|--------|-------------------------------------------------------|--------------------------|------------------------------|-------------------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|----------------------|--------------------------|-----------------------|--------------------|------------------------|---------------------|------------------------------|----------------|----------------------|---------------------------------------------|------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP          |          |                            |        |                                                       |                          |                              | VOCs/EPA 8260B          | 1,4-Dioxane EPA 8260SIM | SVOCs EPA 8270C & PAHs 8270 SIM | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/60208&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **Hydrazine EPA 8315A | **p-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B |                              | **pH EPA 9045C | **Alcohols EPA 8015B | **Glycols EPA 8015B                         | **Terphenyls EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                                      | DATE     | TIME                       | MATRIX | Preservative                                          | Type & No. of Containers |                              |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                              |                |                      |                                             |                        |
| SL-037-SA5C-SB-3.5-4.5MS                                                                                                                                                           | 12.02.10 | 0947                       | soil   | none                                                  | 6 - 16 oz. jars          |                              |                         | X                       |                                 |                   | X                      | X                            | X                     | X                   | X              | X                       |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                              | MS/MSD         |                      |                                             |                        |
| SL-037-SA5C-SB-3.5-4.5MS                                                                                                                                                           | 12.02.10 | 0947                       | soil   | none                                                  | 3 - 16 oz. jar           |                              |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         | X                      | X                                    |                                           | X                                        | X                    | X                        | X                     |                    |                        | X                   | MS/MSD                       |                |                      |                                             |                        |
| SL-037-SA5C-SB-3.5-4.5MS                                                                                                                                                           | 12.02.10 | 0947                       | soil   | none                                                  | 9 - 4 oz. jars           |                              |                         |                         | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    | X                      | X                   | MS/MSD                       |                |                      |                                             |                        |
| SL-037-SA5C-SB-3.5-4.5MS                                                                                                                                                           | 12.02.10 | 0947                       | soil   | none                                                  | 3 - 4 oz. amber jar      |                              |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      | X                                         |                                          |                      |                          |                       |                    |                        |                     | MS/MSD                       |                |                      |                                             |                        |
| <div style="font-size: 2em; transform: rotate(-15deg); opacity: 0.5;">Shelly Samantoni</div> <div style="font-size: 1.5em; transform: rotate(-15deg); opacity: 0.5;">12/2/10</div> |          |                            |        |                                                       |                          |                              |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                              |                |                      |                                             |                        |
| Relinquished by: (Signature)<br><i>Shelly Samantoni</i>                                                                                                                            |          | Date/Time<br>12.02.10 1630 |        | Received for Laboratory by: (Signature)<br><i>M/M</i> |                          | Date/Time<br>12/3/10 910     |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                              |                |                      | Laboratory:<br>Lancaster Laboratories, Inc. |                        |
| Received by: (Signature)<br><i>FedEx</i>                                                                                                                                           |          | Date/Time                  |        | Airbill No.<br>00732992                               |                          | Tracking Number 869514318472 |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                        |                     |                              |                |                      | Cooler 1                                    |                        |

# Explanation of Symbols and Abbreviations

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

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | 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.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | 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. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | 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 |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | Correlation coefficient for MSA $<0.995$                |

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

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

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

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

**ANALYTICAL RESULTS**

Prepared by:

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

Prepared for:

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

December 30, 2010

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/04/2010

Group Number: 1223934

SDG: DX013

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample DescriptionSL-030-SA5C-SB-9.0-10.0 Soil  
SL-030-SA5C-SB-4.0-5.0 Soil  
SL-031-SA5C-SB-9.0-10.0 Soil  
SL-031-SA5C-SB-4.0-5.0 Soil  
SL-032-SA5C-SB-4.0-5.0 Soil  
SL-032-SA5C-SB-4.0-5.0MS Soil  
SL-032-SA5C-SB-4.0-5.0MSD Soil  
DUP11-SA5C-QC-120310 SoilLancaster Labs (LLI) #6156152  
6156153  
6156154  
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6156157  
6156158  
6156159

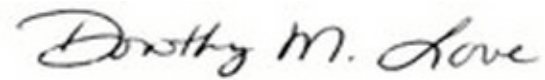
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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,



Dorothy M. Love  
Group Leader



# Analysis Report

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

Page 1 of 4

**Sample Description:** SL-030-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA5C-SB-9.0-10.0

LLI Sample # SW 6156152  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 10:40

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D30-9 SDG#: DX013-01

| 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 Total Solids 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-030-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA5C-SB-9.0-10.0

LLI Sample # SW 6156152  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 10:40

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D30-9 SDG#: DX013-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0159 JB    | 0.0130       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0566 JB    | 0.0188       | 5.68         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0250 JBQ   | 0.0207       | 5.68         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.162 JB     | 0.0217       | 5.68         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0804 JB    | 0.0208       | 5.68         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 8.79 B       | 0.0283       | 5.68         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 83.7 B       | 0.0426       | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0133 U     | 0.0133       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0224 JBQ   | 0.0117       | 5.68         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0667 JBQ   | 0.0108       | 5.68         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0439 JB    | 0.0126       | 5.68         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0337 JB    | 0.0120       | 5.68         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0612 JBQ   | 0.0138       | 5.68         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0592 JB    | 0.0122       | 5.68         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.271 JB     | 0.0119       | 5.68         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0969 JB    | 0.0153       | 5.68         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.634 JB     | 0.0202       | 11.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 79   | 25 - 164 |
| 13C12-12378-PeCDD     | 87   | 25 - 181 |
| 13C12-123478-HxCDD    | 80   | 32 - 141 |
| 13C12-123678-HxCDD    | 75   | 28 - 130 |
| 13C12-123789-HxCDD    | 77   | 28 - 130 |
| 13C12-1234678-HpCDD   | 78   | 23 - 140 |
| 13C12-OCDD            | 69   | 17 - 157 |
| 13C12-2378-TCDF       | 79   | 24 - 169 |
| 13C12-12378-PeCDF     | 86   | 24 - 185 |
| 13C12-23478-PeCDF     | 86   | 21 - 178 |
| 13C12-123478-HxCDF    | 76   | 26 - 152 |
| 13C12-123678-HxCDF    | 75   | 26 - 123 |
| 13C12-234678-HxCDF    | 76   | 28 - 136 |
| 13C12-123789-HxCDF    | 74   | 29 - 147 |
| 13C12-1234678-HpCDF   | 78   | 28 - 143 |
| 13C12-1234789-HpCDF   | 71   | 26 - 138 |
| 13C12-OCDF            | 61   | 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-030-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA5C-SB-9.0-10.0

LLI Sample # SW 6156152  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 10:40

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D30-9 SDG#: DX013-01

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

**Sample Description:** SL-030-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA5C-SB-9.0-10.0

LLI Sample # SW 6156152  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 10:40

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D30-9 SDG#: DX013-01

## 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      | 10349002     | 12/18/2010 08:14       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 1               |
| 11625   | 28a Total Solids by 160.3      | EPA 160.3 modified | 1      | 10354162401A | 12/20/2010 16:51       | 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-030-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA5C-SB-4.0-5.0

LLI Sample # SW 6156153  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 10:36

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D30-4 SDG#: DX013-02

| CAT No.       | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | EPA 160.3 modified        |            | %          | %                           | %                         |                 |
| 11625         | 28a Total Solids by 160.3 | n.a.       | 10.0       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-030-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA5C-SB-4.0-5.0

LLI Sample # SW 6156153  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 10:36

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D30-4 SDG#: DX013-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0204 JBQ   | 0.0144       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0527 JBQ   | 0.0178       | 5.56         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0240 JB    | 0.0192       | 5.56         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.272 JB     | 0.0191       | 5.56         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.335 JBQ    | 0.0198       | 5.56         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.58 JB      | 0.0219       | 5.56         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 31.7 B       | 0.0301       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0449 JBQ   | 0.0248       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0737 JB    | 0.0142       | 5.56         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.121 JBQ    | 0.0123       | 5.56         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0613 JBQ   | 0.0172       | 5.56         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0731 JB    | 0.0170       | 5.56         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.265 JBQ    | 0.0189       | 5.56         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0673 JBQ   | 0.0169       | 5.56         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.299 JB     | 0.0116       | 5.56         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0496 JBQ   | 0.0146       | 5.56         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.409 JB     | 0.0207       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 77   | 25 - 164 |
| 13C12-12378-PeCDD     | 88   | 25 - 181 |
| 13C12-123478-HxCDD    | 80   | 32 - 141 |
| 13C12-123678-HxCDD    | 76   | 28 - 130 |
| 13C12-123789-HxCDD    | 78   | 28 - 130 |
| 13C12-1234678-HpCDD   | 79   | 23 - 140 |
| 13C12-OCDD            | 71   | 17 - 157 |
| 13C12-2378-TCDF       | 79   | 24 - 169 |
| 13C12-12378-PeCDF     | 84   | 24 - 185 |
| 13C12-23478-PeCDF     | 86   | 21 - 178 |
| 13C12-123478-HxCDF    | 75   | 26 - 152 |
| 13C12-123678-HxCDF    | 74   | 26 - 123 |
| 13C12-234678-HxCDF    | 76   | 28 - 136 |
| 13C12-123789-HxCDF    | 75   | 29 - 147 |
| 13C12-1234678-HpCDF   | 80   | 28 - 143 |
| 13C12-1234789-HpCDF   | 73   | 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-030-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA5C-SB-4.0-5.0

LLI Sample # SW 6156153  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 10:36

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D30-4 SDG#: DX013-02

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

**Sample Description:** SL-030-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA5C-SB-4.0-5.0

LLI Sample # SW 6156153  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 10:36

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D30-4 SDG#: DX013-02

## 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      | 10349002     | 12/18/2010 09:10       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 1               |
| 11625   | 28a Total Solids by 160.3      | EPA 160.3 modified | 1      | 10354162401A | 12/20/2010 16:51       | Scott W Freisher | 1               |



# Analysis Report

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**Sample Description:** SL-031-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-031-SA5C-SB-9.0-10.0

LLI Sample # SW 6156154  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 12:44

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D31-9 SDG#: DX013-03

| CAT No.       | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | EPA 160.3 modified        |            | %          | %                           | %                         |                 |
| 11625         | 28a Total Solids 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-031-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-031-SA5C-SB-9.0-10.0

LLI Sample # SW 6156154  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 12:44

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D31-9 SDG#: DX013-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0200 JBQ   | 0.0171       | 1.15         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0189 U     | 0.0189       | 5.74         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0141 U     | 0.0141       | 5.74         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0331 JB    | 0.0141       | 5.74         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0348 JBQ   | 0.0141       | 5.74         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.138 JBQ    | 0.0216       | 5.74         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.746 JBQ    | 0.0254       | 11.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0147 JBQ   | 0.0145       | 1.15         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0406 JB    | 0.0114       | 5.74         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0644 JBQ   | 0.0104       | 5.74         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0477 JBQ   | 0.00953      | 5.74         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0318 JB    | 0.00918      | 5.74         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0386 JBQ   | 0.0102       | 5.74         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0322 JBQ   | 0.00930      | 5.74         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.121 JBQ    | 0.00930      | 5.74         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0443 JBQ   | 0.0121       | 5.74         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.139 JB     | 0.0225       | 11.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 74   | 25 - 164 |
| 13C12-12378-PeCDD     | 86   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 78   | 23 - 140 |
| 13C12-OCDD            | 70   | 17 - 157 |
| 13C12-2378-TCDF       | 75   | 24 - 169 |
| 13C12-12378-PeCDF     | 83   | 24 - 185 |
| 13C12-23478-PeCDF     | 83   | 21 - 178 |
| 13C12-123478-HxCDF    | 71   | 26 - 152 |
| 13C12-123678-HxCDF    | 71   | 26 - 123 |
| 13C12-234678-HxCDF    | 72   | 28 - 136 |
| 13C12-123789-HxCDF    | 72   | 29 - 147 |
| 13C12-1234678-HpCDF   | 78   | 28 - 143 |
| 13C12-1234789-HpCDF   | 69   | 26 - 138 |
| 13C12-OCDF            | 60   | 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-031-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-031-SA5C-SB-9.0-10.0

LLI Sample # SW 6156154  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 12:44

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D31-9 SDG#: DX013-03

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

**Sample Description:** SL-031-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-031-SA5C-SB-9.0-10.0

LLI Sample # SW 6156154  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 12:44

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/04/2010 10:00

Suite 210

Reported: 12/30/2010 17:06

Chantilly VA 20151

D31-9 SDG#: DX013-03

---

## 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.

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## 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      | 10349002     | 12/18/2010 10:07       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 1               |
| 11625   | 28a Total Solids by 160.3      | EPA 160.3 modified | 1      | 10354162401A | 12/20/2010 16:51       | Scott W Freisher | 1               |



# Analysis Report

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**Sample Description:** SL-031-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-031-SA5C-SB-4.0-5.0

LLI Sample # SW 6156155  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 12:40

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D31-4 SDG#: DX013-04

| 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 Total Solids by 160.3 | n.a.       | 11.2       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-031-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-031-SA5C-SB-4.0-5.0

LLI Sample # SW 6156155  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 12:40

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D31-4 SDG#: DX013-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0151 U     | 0.0151       | 1.13         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.114 JBQ    | 0.0200       | 5.63         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0412 JBQ   | 0.0205       | 5.63         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.359 JB     | 0.0202       | 5.63         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.569 JB     | 0.0204       | 5.63         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.689 JB     | 0.0252       | 5.63         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 5.59 JB      | 0.0285       | 11.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0155 U     | 0.0155       | 1.13         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0767 JBQ   | 0.0130       | 5.63         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0817 JBQ   | 0.0114       | 5.63         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0779 JBQ   | 0.0172       | 5.63         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0888 JBQ   | 0.0161       | 5.63         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.488 JBQ    | 0.0189       | 5.63         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0671 JB    | 0.0166       | 5.63         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.362 JB     | 0.0154       | 5.63         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0748 JBQ   | 0.0187       | 5.63         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.340 JB     | 0.0255       | 11.3         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 71   | 25 - 164 |
| 13C12-12378-PeCDD     | 83   | 25 - 181 |
| 13C12-123478-HxCDD    | 72   | 32 - 141 |
| 13C12-123678-HxCDD    | 69   | 28 - 130 |
| 13C12-123789-HxCDD    | 71   | 28 - 130 |
| 13C12-1234678-HpCDD   | 69   | 23 - 140 |
| 13C12-OCDD            | 54   | 17 - 157 |
| 13C12-2378-TCDF       | 75   | 24 - 169 |
| 13C12-12378-PeCDF     | 79   | 24 - 185 |
| 13C12-23478-PeCDF     | 81   | 21 - 178 |
| 13C12-123478-HxCDF    | 70   | 26 - 152 |
| 13C12-123678-HxCDF    | 70   | 26 - 123 |
| 13C12-234678-HxCDF    | 70   | 28 - 136 |
| 13C12-123789-HxCDF    | 67   | 29 - 147 |
| 13C12-1234678-HpCDF   | 67   | 28 - 143 |
| 13C12-1234789-HpCDF   | 63   | 26 - 138 |
| 13C12-OCDF            | 49   | 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



# Analysis Report

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

Page 3 of 4

**Sample Description:** SL-031-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-031-SA5C-SB-4.0-5.0

LLI Sample # SW 6156155  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 12:40

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D31-4 SDG#: DX013-04

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

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

**Sample Description:** SL-031-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-031-SA5C-SB-4.0-5.0

LLI Sample # SW 6156155  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 12:40

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D31-4 SDG#: DX013-04

## 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      | 10349002     | 12/18/2010 11:04       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 1               |
| 11625   | 28a Total Solids by 160.3      | EPA 160.3 modified | 1      | 10354162401A | 12/20/2010 16:51       | 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-032-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

LLI Sample # SW 6156156  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 15:00

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D32-4 SDG#: DX013-05BKG

| 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 Total Solids by 160.3 | n.a.       | 7.8        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-032-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

LLI Sample # SW 6156156  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 15:00

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D32-4 SDG#: DX013-05BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0404 JBQ   | 0.0177       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0754 JB    | 0.0210       | 5.42         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0433 JBQ   | 0.0174       | 5.42         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0500 JBQ   | 0.0180       | 5.42         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0644 JBQ   | 0.0168       | 5.42         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.603 JB     | 0.0269       | 5.42         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 4.45 JB      | 0.0308       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0213 JBQ   | 0.0172       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0772 JB    | 0.0137       | 5.42         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.110 JBQ    | 0.0121       | 5.42         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0833 JB    | 0.0144       | 5.42         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0786 JB    | 0.0136       | 5.42         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0276 JBQ   | 0.0153       | 5.42         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0739 JB    | 0.0141       | 5.42         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.270 JB     | 0.0129       | 5.42         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0627 JB    | 0.0174       | 5.42         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.207 JB     | 0.0287       | 10.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 63   | 25 - 164 |
| 13C12-12378-PeCDD     | 82   | 25 - 181 |
| 13C12-123478-HxCDD    | 78   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 77   | 28 - 130 |
| 13C12-1234678-HpCDD   | 79   | 23 - 140 |
| 13C12-OCDD            | 69   | 17 - 157 |
| 13C12-2378-TCDF       | 60   | 24 - 169 |
| 13C12-12378-PeCDF     | 76   | 24 - 185 |
| 13C12-23478-PeCDF     | 78   | 21 - 178 |
| 13C12-123478-HxCDF    | 71   | 26 - 152 |
| 13C12-123678-HxCDF    | 71   | 26 - 123 |
| 13C12-234678-HxCDF    | 72   | 28 - 136 |
| 13C12-123789-HxCDF    | 73   | 29 - 147 |
| 13C12-1234678-HpCDF   | 81   | 28 - 143 |
| 13C12-1234789-HpCDF   | 70   | 26 - 138 |
| 13C12-OCDF            | 58   | 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-032-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6156156  
**LLI Group #** 1223934  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 15:00

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D32-4 SDG#: DX013-05BKG

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

**Sample Description:** SL-032-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

LLI Sample # SW 6156156  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 15:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/04/2010 10:00

Suite 210

Reported: 12/30/2010 17:06

Chantilly VA 20151

D32-4 SDG#: DX013-05BKG

## 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      | 10349002     | 12/18/2010 12:00       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 1               |
| 11625   | 28a Total Solids by 160.3      | EPA 160.3 modified | 1      | 10354162401A | 12/20/2010 16:51       | Scott W Freisher | 1               |



# Analysis Report

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**Sample Description:** SL-032-SA5C-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

LLI Sample # SW 6156157  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 15:00

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D32-4 SDG#: DX013-05MS

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | 28a Total Solids by 160.3 | n.a.       | 7.8        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-032-SA5C-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

LLI Sample # SW 6156157  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 15:00

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D32-4 SDG#: DX013-05MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 20.9         | B            | 0.0233       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 108          | B            | 0.0296       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 109          | B            | 0.0265       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 107          | B            | 0.0270       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 107          | B            | 0.0266       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 108          | B            | 0.0423       | 1               |
| 11031                 | OCDD          | 3268-87-9        | 216          | B            | 0.0483       | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 21.1         | B            | 0.0228       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 107          | B            | 0.0244       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 107          | B            | 0.0225       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 106          | B            | 0.0465       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 106          | B            | 0.0447       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 106          | B            | 0.0471       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 107          | B            | 0.0450       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 106          | B            | 0.0400       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 110          | B            | 0.0514       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 216          | B            | 0.0408       | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 75   | 25 - 164 |
| 13C12-12378-PeCDD     | 87   | 25 - 181 |
| 13C12-123478-HxCDD    | 81   | 32 - 141 |
| 13C12-123678-HxCDD    | 77   | 28 - 130 |
| 13C12-123789-HxCDD    | 80   | 28 - 130 |
| 13C12-1234678-HpCDD   | 80   | 23 - 140 |
| 13C12-OCDD            | 69   | 17 - 157 |
| 13C12-2378-TCDF       | 73   | 24 - 169 |
| 13C12-12378-PeCDF     | 84   | 24 - 185 |
| 13C12-23478-PeCDF     | 84   | 21 - 178 |
| 13C12-123478-HxCDF    | 75   | 26 - 152 |
| 13C12-123678-HxCDF    | 74   | 26 - 123 |
| 13C12-234678-HxCDF    | 76   | 28 - 136 |
| 13C12-123789-HxCDF    | 80   | 29 - 147 |
| 13C12-1234678-HpCDF   | 81   | 28 - 143 |
| 13C12-1234789-HpCDF   | 72   | 26 - 138 |
| 13C12-OCDF            | 61   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 82   | 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-032-SA5C-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

LLI Sample # SW 6156157  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 15:00

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D32-4 SDG#: DX013-05MS

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



# Analysis Report

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**Sample Description:** SL-032-SA5C-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6156157  
**LLI Group #** 1223934  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/03/2010 15:00

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

**Submitted:** 12/04/2010 10:00

**Reported:** 12/30/2010 17:06

D32-4 SDG#: DX013-05MS

## 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      | 10349002     | 12/18/2010 12:57       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 1               |
| 11625   | 28a Total Solids by 160.3      | EPA 160.3 modified | 1      | 10354162401A | 12/20/2010 16:51       | Scott W Freisher | 1               |

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



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-032-SA5C-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

LLI Sample # SW 6156158  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 15:00

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D32-4 SDG#: DX013-05MSD

| 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 Total Solids by 160.3 | n.a.       | 7.8        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-032-SA5C-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

LLI Sample # SW 6156158  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 15:00

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D32-4 SDG#: DX013-05MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|---|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |   | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.2         | B | 0.0264       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 108          | B | 0.0344       | 5.42         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 111          | B | 0.0381       | 5.42         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 108          | B | 0.0396       | 5.42         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 108          | B | 0.0381       | 5.42         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 109          | B | 0.0559       | 5.42         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 213          | B | 0.0553       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 21.4         | B | 0.0300       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 109          | B | 0.0291       | 5.42         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 108          | B | 0.0271       | 5.42         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 105          | B | 0.0478       | 5.42         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 107          | B | 0.0463       | 5.42         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 106          | B | 0.0531       | 5.42         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 109          | B | 0.0471       | 5.42         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 106          | B | 0.0397       | 5.42         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 109          | B | 0.0533       | 5.42         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 217          | B | 0.0517       | 10.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 61   | 25 - 164 |
| 13C12-12378-PeCDD     | 70   | 25 - 181 |
| 13C12-123478-HxCDD    | 66   | 32 - 141 |
| 13C12-123678-HxCDD    | 62   | 28 - 130 |
| 13C12-123789-HxCDD    | 65   | 28 - 130 |
| 13C12-1234678-HpCDD   | 67   | 23 - 140 |
| 13C12-OCDD            | 60   | 17 - 157 |
| 13C12-2378-TCDF       | 61   | 24 - 169 |
| 13C12-12378-PeCDF     | 68   | 24 - 185 |
| 13C12-23478-PeCDF     | 67   | 21 - 178 |
| 13C12-123478-HxCDF    | 63   | 26 - 152 |
| 13C12-123678-HxCDF    | 62   | 26 - 123 |
| 13C12-234678-HxCDF    | 62   | 28 - 136 |
| 13C12-123789-HxCDF    | 61   | 29 - 147 |
| 13C12-1234678-HpCDF   | 70   | 28 - 143 |
| 13C12-1234789-HpCDF   | 59   | 26 - 138 |
| 13C12-OCDF            | 51   | 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



# Analysis Report

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

Page 3 of 4

**Sample Description:** SL-032-SA5C-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

LLI Sample # SW 6156158  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 15:00

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

D32-4 SDG#: DX013-05MSD

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

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

**Sample Description:** SL-032-SA5C-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6156158  
**LLI Group #** 1223934  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/03/2010 15:00

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

**Submitted:** 12/04/2010 10:00

**Reported:** 12/30/2010 17:06

**D32-4 SDG#:** DX013-05MSD

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### General Sample Comments

State of California Lab Certification No. 2501

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

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### 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      | 10349002     | 12/18/2010 16:56       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 1               |
| 11625   | 28a Total Solids by 160.3      | EPA 160.3 modified | 1      | 10354162401A | 12/20/2010 16:51       | Scott W Freisher | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** DUP11-SA5C-QC-120310 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP11-SA5C-QC-120310

LLI Sample # SW 6156159  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 14:53

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

DDP11 SDG#: DX013-06FD

| 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 Total Solids by 160.3 | n.a.       | 8.0        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** DUP11-SA5C-QC-120310 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP11-SA5C-QC-120310

**LLI Sample #** SW 6156159  
**LLI Group #** 1223934  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/03/2010 14:53

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

**Submitted:** 12/04/2010 10:00

**Reported:** 12/30/2010 17:06

DDP11 SDG#: DX013-06FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.107 JBQ    | 0.0174       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.253 JBQ    | 0.0235       | 5.43         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.154 JBQ    | 0.0196       | 5.43         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.184 JBQ    | 0.0198       | 5.43         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.203 JBQ    | 0.0197       | 5.43         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.257 JBQ    | 0.0174       | 5.43         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.555 JB     | 0.0225       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0706 JBQ   | 0.0152       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.344 JB     | 0.0130       | 5.43         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.306 JB     | 0.0120       | 5.43         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.212 JBQ    | 0.0189       | 5.43         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.176 JBQ    | 0.0182       | 5.43         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.201 JBQ    | 0.0210       | 5.43         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.205 JB     | 0.0180       | 5.43         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.298 JB     | 0.00913      | 5.43         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.185 JB     | 0.0123       | 5.43         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.339 JB     | 0.0205       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 58   | 25 - 164 |
| 13C12-12378-PeCDD     | 77   | 25 - 181 |
| 13C12-123478-HxCDD    | 76   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 76   | 23 - 140 |
| 13C12-OCDD            | 66   | 17 - 157 |
| 13C12-2378-TCDF       | 59   | 24 - 169 |
| 13C12-12378-PeCDF     | 73   | 24 - 185 |
| 13C12-23478-PeCDF     | 74   | 21 - 178 |
| 13C12-123478-HxCDF    | 71   | 26 - 152 |
| 13C12-123678-HxCDF    | 71   | 26 - 123 |
| 13C12-234678-HxCDF    | 72   | 28 - 136 |
| 13C12-123789-HxCDF    | 71   | 29 - 147 |
| 13C12-1234678-HpCDF   | 79   | 28 - 143 |
| 13C12-1234789-HpCDF   | 68   | 26 - 138 |
| 13C12-OCDF            | 57   | 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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Page 3 of 4

**Sample Description:** DUP11-SA5C-QC-120310 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP11-SA5C-QC-120310

LLI Sample # SW 6156159  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 14:53

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

Submitted: 12/04/2010 10:00

Reported: 12/30/2010 17:06

DDP11 SDG#: DX013-06FD

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

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

**Sample Description:** DUP11-SA5C-QC-120310 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP11-SA5C-QC-120310

LLI Sample # SW 6156159  
LLI Group # 1223934  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/03/2010 14:53

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/04/2010 10:00

Suite 210

Reported: 12/30/2010 17:06

Chantilly VA 20151

DDP11 SDG#: DX013-06FD

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## General Sample Comments

State of California Lab Certification No. 2501

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

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## 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      | 10349002     | 12/18/2010 17:53       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 1               |
| 11625   | 28a Total Solids by 160.3      | EPA 160.3 modified | 1      | 10354162401A | 12/20/2010 16:51       | Scott W Freisher | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 12/30/10 at 05:06 PM

Group Number: 1223934

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: 10354162401A<br>28a Total Solids by 160.3 | Sample number(s): 6156152-6156159 |                    |                  |                     | 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: 10349002 | Sample number(s): 6156152-6156159 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0213 J                          | 0.0107             | 1.00             | ng/kg               | 97              |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0359 J                          | 0.0168             | 5.00             | ng/kg               | 100             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0243 J                          | 0.0119             | 5.00             | ng/kg               | 102             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0229 J                          | 0.0123             | 5.00             | ng/kg               | 101             |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0240 J                          | 0.0118             | 5.00             | ng/kg               | 101             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.0999 J                          | 0.0140             | 5.00             | ng/kg               | 103             |                  | 70-140                 |            |                |
| OCDD                   | 0.159 J                           | 0.0186             | 10.0             | ng/kg               | 102             |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0151 J                          | 0.0118             | 1.00             | ng/kg               | 103             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0422 J                          | 0.00930            | 5.00             | ng/kg               | 101             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0850 J                          | 0.00910            | 5.00             | ng/kg               | 99              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0438 J                          | 0.00940            | 5.00             | ng/kg               | 100             |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0318 J                          | 0.00870            | 5.00             | ng/kg               | 96              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0737 J                          | 0.0101             | 5.00             | ng/kg               | 101             |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0534 J                          | 0.00920            | 5.00             | ng/kg               | 100             |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.144 J                           | 0.00710            | 5.00             | ng/kg               | 100             |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0527 J                          | 0.00990            | 5.00             | ng/kg               | 102             |                  | 78-138                 |            |                |
| OCDF                   | 0.177 J                           | 0.0195             | 10.0             | ng/kg               | 102             |                  | 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: 10354162401A<br>28a Total Solids by 160.3 | Sample number(s): 6156152-6156159 |                 |                      |            |                | BKG: P156146<br>7.8 | 7.5             | 3              | 20                 |
| Batch number: 10349002                                  | Sample number(s): 6156152-6156159 |                 |                      |            |                | UNSPK: 6156156      |                 |                |                    |
| 2378-TCDD                                               | 96                                | 97              | 67-158               | 1          | 25             |                     |                 |                |                    |
| 12378-PeCDD                                             | 99                                | 100             | 70-142               | 0          | 25             |                     |                 |                |                    |
| 123478-HxCDD                                            | 100                               | 102             | 70-164               | 2          | 25             |                     |                 |                |                    |
| 123678-HxCDD                                            | 99                                | 100             | 76-134               | 1          | 25             |                     |                 |                |                    |
| 123789-HxCDD                                            | 99                                | 99              | 64-162               | 0          | 25             |                     |                 |                |                    |
| 1234678-HpCDD                                           | 99                                | 100             | 70-140               | 1          | 25             |                     |                 |                |                    |
| OCDD                                                    | 98                                | 96              | 78-144               | 2          | 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: 12/30/10 at 05:06 PM

Group Number: 1223934

### 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<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 2378-TCDF     | 97         | 98          | 75-158           | 1   | 25         |             |             |            |                |
| 12378-PeCDF   | 98         | 100         | 80-134           | 2   | 25         |             |             |            |                |
| 23478-PeCDF   | 99         | 99          | 68-160           | 1   | 25         |             |             |            |                |
| 123478-HxCDF  | 98         | 97          | 72-134           | 1   | 25         |             |             |            |                |
| 123678-HxCDF  | 98         | 99          | 84-130           | 1   | 25         |             |             |            |                |
| 123789-HxCDF  | 97         | 98          | 78-130           | 1   | 25         |             |             |            |                |
| 234678-HxCDF  | 99         | 100         | 70-156           | 1   | 25         |             |             |            |                |
| 1234678-HpCDF | 97         | 97          | 82-122           | 0   | 25         |             |             |            |                |
| 1234789-HpCDF | 101        | 100         | 78-138           | 1   | 25         |             |             |            |                |
| OCDF          | 99         | 100         | 63-170           | 1   | 25         |             |             |            |                |

### Surrogate Quality Control

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

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 10349002

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF       | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------------|--------------------|--------------------|
| 6156152 | 79                  | 86                  | 76                 | 75                       | 76                 | 74                 |
| 6156153 | 77                  | 86                  | 75                 | 74                       | 76                 | 75                 |
| 6156154 | 74                  | 83                  | 71                 | 71                       | 72                 | 72                 |
| 6156155 | 71                  | 81                  | 70                 | 70                       | 70                 | 67                 |
| 6156156 | 63                  | 78                  | 71                 | 71                       | 72                 | 73                 |
| 6156157 | 75                  | 84                  | 75                 | 74                       | 76                 | 80                 |
| 6156158 | 61                  | 67                  | 63                 | 62                       | 62                 | 61                 |
| 6156159 | 58                  | 74                  | 71                 | 71                       | 72                 | 71                 |
| Blank   | 69                  | 73                  | 67                 | 69                       | 67                 | 65                 |
| MS      | 75                  | 84                  | 75                 | 74                       | 76                 | 80                 |
| MSD     | 61                  | 67                  | 63                 | 62                       | 62                 | 61                 |
| OPR     | 78                  | 81                  | 73                 | 77                       | 74                 | 74                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123                   | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-1278-TCDD<br>(CRS) | 13C12-12378-PeCDD  | 13C12-123478-HxCDD |
| 6156152 | 78                  | 71                  | 61                 | 85                       | 87                 | 80                 |
| 6156153 | 80                  | 73                  | 64                 | 85                       | 88                 | 80                 |
| 6156154 | 78                  | 69                  | 60                 | 81                       | 86                 | 75                 |
| 6156155 | 67                  | 63                  | 49                 | 81                       | 83                 | 72                 |
| 6156156 | 81                  | 70                  | 58                 | 69                       | 82                 | 78                 |
| 6156157 | 81                  | 72                  | 61                 | 82                       | 87                 | 81                 |
| 6156158 | 70                  | 59                  | 51                 | 67                       | 70                 | 66                 |
| 6156159 | 79                  | 68                  | 57                 | 66                       | 77                 | 76                 |
| Blank   | 77                  | 62                  | 52                 | 79                       | 76                 | 73                 |
| MS      | 81                  | 72                  | 61                 | 82                       | 87                 | 81                 |
| MSD     | 70                  | 59                  | 51                 | 67                       | 70                 | 66                 |
| OPR     | 85                  | 65                  | 54                 | 87                       | 88                 | 83                 |

\*- 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: 12/30/10 at 05:06 PM

Group Number: 1223934

### Surrogate Quality Control

| 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 |
| 6156152 | 75                 | 77                 | 78                  | 69         | 79              | 86                |
| 6156153 | 76                 | 78                 | 79                  | 71         | 79              | 84                |
| 6156154 | 73                 | 74                 | 78                  | 70         | 75              | 83                |
| 6156155 | 69                 | 71                 | 69                  | 54         | 75              | 79                |
| 6156156 | 73                 | 77                 | 79                  | 69         | 60              | 76                |
| 6156157 | 77                 | 80                 | 80                  | 69         | 73              | 84                |
| 6156158 | 62                 | 65                 | 67                  | 60         | 61              | 68                |
| 6156159 | 73                 | 74                 | 76                  | 66         | 59              | 73                |
| Blank   | 70                 | 71                 | 73                  | 63         | 68              | 75                |
| MS      | 77                 | 80                 | 80                  | 69         | 73              | 84                |
| MSD     | 62                 | 65                 | 67                  | 60         | 61              | 68                |
| OPR     | 78                 | 80                 | 79                  | 69         | 76              | 85                |
| 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.

Acct# 13013

LC# 6156152-59 GR# 1223934

CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |          |      |        |              |                          | CHAIN OF CUSTODY RECORD    |                         |                                                          |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          | Other Instructions and Notes |                       |                    |                        |                                             |                |                      |                     |                        |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|--------------|--------------------------|----------------------------|-------------------------|----------------------------------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|------------------------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|----------------------|--------------------------|------------------------------|-----------------------|--------------------|------------------------|---------------------------------------------|----------------|----------------------|---------------------|------------------------|-------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |          |      |        |              |                          | VOCs/EPA 8260B             | 1,4-Dioxane EPA 8260SIM | SVOCs EPA 8270C & PAHs 8270 SIM                          | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6010B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082               | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A |                              | **Hydrazine EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B                         | **pH EPA 9045C | **Alcohols EPA 8015B | **Glycols EPA 8015B | **Terphenyls EPA 8015B |                   |
| SAMPLE NUMBER                                                                                                                                                             | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers |                            |                         |                                                          |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        |                   |
| DUP11-SA5C-QC-120310                                                                                                                                                      | 12.03.10 | 1453 | soil   | none         | 2 - 16 oz. jars          |                            |                         | X                                                        |                   |                        | X                            | X                     | X                   | X                            | X                       | X                      |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        |                   |
| DUP11-SA5C-QC-120310                                                                                                                                                      | 12.03.10 | 1453 | soil   | none         | 1 - 16 oz. jar           |                            |                         |                                                          |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           | X                                        | X                    |                          | X                            | X                     | X                  | X                      |                                             |                |                      | X                   |                        |                   |
| DUP11-SA5C-QC-120310                                                                                                                                                      | 12.03.10 | 1453 | soil   | none         | 3 - 4 oz. jars           |                            |                         |                                                          | X                 |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        | X                                           | X              |                      |                     |                        |                   |
| DUP11-SA5C-QC-120310                                                                                                                                                      | 12.03.10 | 1453 | soil   | none         | 5 encore samplers        |                            | X                       | X                                                        | X                 |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        |                   |
| TB-120310                                                                                                                                                                 | 12.03.10 | 1330 | water  | HCl          | 4 - 40 ml vials          |                            | X                       | X                                                        | X                 |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        | Trip Blank        |
| SL-032-SA5C-SB-4.5MS                                                                                                                                                      | 12.03.10 | 1445 | soil   | none         | 15 encore samplers       |                            | X                       | X                                                        | X                 |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        | MS/MSD            |
| SL-030-SA5C-SB-4.5                                                                                                                                                        | 12.03.10 | 1033 | soil   | none         | 5 encore samplers        |                            | X                       | X                                                        | X                 |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        |                   |
| SL-030-SA5C-SB-9.5                                                                                                                                                        | 12.03.10 | 1040 | soil   | none         | 5 encore samplers        |                            | X                       | X                                                        | X                 |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        | Possible Staining |
| SL-031-SA5C-SB-9.5                                                                                                                                                        | 12.03.10 | 1242 | soil   | none         | 5 encore samplers        |                            | X                       | X                                                        | X                 |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        | Possible Staining |
| SL-031-SA5C-SB-4.5                                                                                                                                                        | 12.03.10 | 1236 | soil   | none         | 5 encore samplers        |                            | X                       | X                                                        | X                 |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        |                   |
| SL-031-SA5C-SB-4.0-5.0                                                                                                                                                    | 12.03.10 | 1240 | soil   | none         | 2 - 16 oz. jars          |                            |                         | X                                                        |                   |                        | X                            | X                     | X                   | X                            | X                       | X                      |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        |                   |
| SL-031-SA5C-SB-4.0-5.0                                                                                                                                                    | 12.03.10 | 1240 | soil   | none         | 1 - 16 oz. jar           |                            |                         |                                                          |                   |                        |                              |                       |                     |                              |                         |                        |                                      | X                                         | X                                        |                      | X                        | X                            | X                     | X                  | X                      |                                             |                |                      |                     | X                      |                   |
| SL-031-SA5C-SB-4.0-5.0                                                                                                                                                    | 12.03.10 | 1240 | soil   | none         | 3 - 4 oz. jars           |                            |                         |                                                          | X                 |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             | X              | X                    |                     |                        |                   |
|                                                                                                                                                                           |          |      |        |              |                          | Shelly Samantoni 12/3/10   |                         |                                                          |                   |                        |                              |                       |                     |                              |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     |                        |                   |
| Relinquished by: (Signature)<br>Shelly Samantoni                                                                                                                          |          |      |        |              |                          | Date/Time<br>12.03.10 1630 |                         | Received for Laboratory by: (Signature)<br>Laura J. Lapp |                   |                        |                              |                       |                     | Date/Time<br>12/4/10 1000    |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        | Laboratory:<br>Lancaster Laboratories, Inc. |                |                      |                     |                        |                   |
| Received by: (Signature)<br>FedEx                                                                                                                                         |          |      |        |              |                          | Date/Time                  |                         | Alpha No.<br>00732992                                    |                   |                        |                              |                       |                     | Tracking Number 869514318380 |                         |                        |                                      |                                           |                                          |                      |                          |                              |                       |                    |                        |                                             |                |                      |                     | Cooler 2               |                   |

#004# 13013

LT# 6015615259 GR# 1223934

CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                        |          |      |        |              |                          | CHAIN OF CUSTODY RECORD |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    | Other Instructions and Notes |                        |                     |                |                      |                     |                        |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|--------------|--------------------------|-------------------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|----------------------|--------------------------|-----------------------|--------------------|------------------------------|------------------------|---------------------|----------------|----------------------|---------------------|------------------------|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP                                                                                                                        |          |      |        |              |                          | VOCs/EPA 8260B          | 1,4-Dioxane EPA 8260SIM | SVOCs EPA 8270C & PAHs 8270 SIM | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **Hydrazine EPA 8315A | **n-NDMA EPA 1625C |                              | **Energetics EPA 8330A | **Cyanide EPA 9012B | **pH EPA 9045C | **Alcohols EPA 8015B | **Glycols EPA 8015B | **Terphenyls EPA 8015B |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                    | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                     |                |                      |                     |                        |  |
| SL-030-SA5C-SB-9.0-10.0                                                                                                                                                                                                                                                                          | 12.03.10 | 1040 | soil   | none         | 2 - 16 oz. jars          |                         |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                     |                |                      |                     | Possible Staining      |  |
| SL-030-SA5C-SB-9.0-10.0                                                                                                                                                                                                                                                                          | 12.03.10 | 1040 | soil   | none         | 1 - 16 oz. jar           |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           | X                                        | X                    |                          | X                     | X                  | X                            | X                      |                     |                |                      | X                   | Possible Staining      |  |
| SL-030-SA5C-SB-9.0-10.0                                                                                                                                                                                                                                                                          | 12.03.10 | 1040 | soil   | none         | 3 - 4 oz. jars           |                         |                         |                                 |                   | X                      |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        | X                   | X              |                      |                     | Possible Staining      |  |
| SL-030-SA5C-SB-4.0-5.0                                                                                                                                                                                                                                                                           | 12.03.10 | 1036 | soil   | none         | 2 - 16 oz. jars          |                         |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                     |                |                      |                     |                        |  |
| SL-030-SA5C-SB-4.0-5.0                                                                                                                                                                                                                                                                           | 12.03.10 | 1036 | soil   | none         | 1 - 16 oz. jar           |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           | X                                        | X                    |                          | X                     | X                  | X                            | X                      |                     |                |                      | X                   |                        |  |
| SL-030-SA5C-SB-4.0-5.0                                                                                                                                                                                                                                                                           | 12.03.10 | 1036 | soil   | none         | 3 - 4 oz. jars           |                         |                         |                                 |                   | X                      |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        | X                   | X              |                      |                     |                        |  |
| SL-031-SA5C-SB-9.0-10.0                                                                                                                                                                                                                                                                          | 12.03.10 | 1244 | soil   | none         | 2 - 16 oz. jars          |                         |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                     |                |                      |                     | Possible Staining      |  |
| SL-031-SA5C-SB-9.0-10.0                                                                                                                                                                                                                                                                          | 12.03.10 | 1244 | soil   | none         | 1 - 16 oz. jar           |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           | X                                        | X                    |                          | X                     | X                  | X                            | X                      |                     |                | X                    |                     | Possible Staining      |  |
| SL-031-SA5C-SB-9.0-10.0                                                                                                                                                                                                                                                                          | 12.03.10 | 1244 | soil   | none         | 3 - 4 oz. jars           |                         |                         |                                 |                   | X                      |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        | X                   | X              |                      |                     | Possible Staining      |  |
| <div style="display: flex; justify-content: space-between;"> <div>Relinquished by: (Signature)<br/><i>Shelly Samantoni</i></div> <div>Date/Time<br/>12.03.10 1630</div> <div>Received for Laboratory by: (Signature)<br/><i>Laura J. Lapp</i></div> <div>Date/Time<br/>12/4/10 1000</div> </div> |          |      |        |              |                          |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                     |                |                      |                     |                        |  |
| <div style="display: flex; justify-content: space-between;"> <div>Received by: (Signature)<br/><i>FedEx</i></div> <div>Date/Time</div> <div>Alpall No.<br/>00732992</div> <div>Tracking Number 869514318391</div> </div>                                                                         |          |      |        |              |                          |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                     |                |                      |                     |                        |  |
| Laboratory:<br>Lancaster Laboratories, Inc.                                                                                                                                                                                                                                                      |          |      |        |              |                          |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                     |                |                      |                     |                        |  |
| Cooler 3                                                                                                                                                                                                                                                                                         |          |      |        |              |                          |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                      |                          |                       |                    |                              |                        |                     |                |                      |                     |                        |  |

### CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       | Other Instructions and Notes |                    |                        |                     |                |                      |                     |                        |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------|--------|-------------------------------------------------------------|--------------------------|---------------------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|---------------------------------------------|------------------------------------------|----------------------|--------------------------|-----------------------|------------------------------|--------------------|------------------------|---------------------|----------------|----------------------|---------------------|------------------------|--------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
| Samplers: (Signature) <i>Rennela Hartman Gully Samantoni</i>                                                                                                              |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
| SAMPLE NUMBER                                                                                                                                                             | DATE     | TIME                       | MATRIX | Preservative                                                | Type & No. of Containers | VOCs/EPA 8260B            | 1,4-Dioxane EPA 8260SIM | SVOCs EPA 8270C & PAHs 8270 SIM | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only)   | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **Hydrazine EPA 8315A |                              | **n-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B | **pH EPA 9045C | **Alcohols EPA 8015B | **Glycols EPA 8015B | **Terphenyls EPA 8015B |        |
| SL-032-SA5C-SB-4.0-5.0MS                                                                                                                                                  | 12.03.10 | 1500                       | soil   | none                                                        | 6 - 16 oz. jars          |                           |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        | MS/MSD |
| SL-032-SA5C-SB-4.0-5.0MS                                                                                                                                                  | 12.03.10 | 1500                       | soil   | none                                                        | 3 - 16 oz. jar           |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          | X                    | X                        |                       | X                            | X                  | X                      | X                   |                |                      | X                   | MS/MSD                 |        |
| SL-032-SA5C-SB-4.0-5.0MS                                                                                                                                                  | 12.03.10 | 1500                       | soil   | none                                                        | 9 - 4 oz. jars           |                           |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     | X              | X                    |                     | MS/MSD                 |        |
| <div style="text-align: center;"> <i>Gully Samantoni</i><br/>             12/3/10           </div>                                                                        |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
|                                                                                                                                                                           |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
|                                                                                                                                                                           |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
|                                                                                                                                                                           |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
|                                                                                                                                                                           |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
|                                                                                                                                                                           |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
|                                                                                                                                                                           |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
|                                                                                                                                                                           |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
|                                                                                                                                                                           |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
|                                                                                                                                                                           |          |                            |        |                                                             |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
| Relinquished by: (Signature) <i>Gully Samantoni</i>                                                                                                                       |          | Date/Time<br>12.03.10 1630 |        | Received for Laboratory by: (Signature) <i>Shirley Lapp</i> |                          | Date/Time<br>12/4/10 1000 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      | Laboratory:<br>Lancaster Laboratories, Inc. |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
| Received by: (Signature) <i>FedEx</i>                                                                                                                                     |          | Date/Time                  |        | Airbill No.<br>00732992                                     |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      | Cooler 1                                    |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |
|                                                                                                                                                                           |          |                            |        | Tracking Number 869514318370                                |                          |                           |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                       |                              |                    |                        |                     |                |                      |                     |                        |        |

# Explanation of Symbols and Abbreviations

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

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | 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.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | 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. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | 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

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

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | 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 12, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/07/2010

Group Number: 1224163

SDG: DX013

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-025-SA5C-SB-4.0-5.0 Soil      | 6157206                       |
| SL-025-SA5C-SB-9.0-10.0 Soil     | 6157207                       |
| SL-024-SA5C-SB-4.0-5.0 Soil      | 6157208                       |
| SL-024-SA5C-SB-9.0-10.0 Soil     | 6157209                       |
| SL-018-SA5C-SB-4.0-5.0 Soil      | 6157210                       |
| DUP12-SA5C-QC-120610 Soil        | 6157211                       |

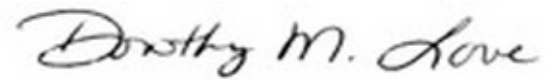
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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-025-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5C-SB-4.0-5.0

LLI Sample # SW 6157206  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 15:13 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D2545 SDG#: DX013-07

| CAT No.                                 | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b> |                               |            |            |                             |                           |                 |
| 11625                                   | 28a Moisture Content by 160.3 | n.a.       | 10.5       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-025-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6157206  
**LLI Group #** 1224163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/06/2010 15:13 by PH

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

**Submitted:** 12/07/2010 09:45

**Reported:** 01/12/2011 20:21

D2545 SDG#: DX013-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0622 JBQ   | 0.0253       | 1.12         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.313 JB     | 0.0306       | 5.59         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.303 JBQ    | 0.0407       | 5.59         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.976 JB     | 0.0429       | 5.59         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.686 JB     | 0.0412       | 5.59         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 25.9 B       | 0.0521       | 5.59         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 449 B        | 0.0872       | 11.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0903 JB    | 0.0305       | 1.12         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.347 JB     | 0.0211       | 5.59         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.339 JBQ    | 0.0188       | 5.59         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.213 JB     | 0.0302       | 5.59         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.246 JBQ    | 0.0292       | 5.59         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.227 JBQ    | 0.0340       | 5.59         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.268 JBQ    | 0.0297       | 5.59         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.67 JB      | 0.0204       | 5.59         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.243 JBQ    | 0.0239       | 5.59         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 8.13 JB      | 0.0363       | 11.2         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 69   | 25 - 164 |
| 13C12-12378-PeCDD     | 84   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 70   | 28 - 130 |
| 13C12-123789-HxCDD    | 72   | 28 - 130 |
| 13C12-1234678-HpCDD   | 73   | 23 - 140 |
| 13C12-OCDD            | 64   | 17 - 157 |
| 13C12-2378-TCDF       | 74   | 24 - 169 |
| 13C12-12378-PeCDF     | 80   | 24 - 185 |
| 13C12-23478-PeCDF     | 84   | 21 - 178 |
| 13C12-123478-HxCDF    | 72   | 26 - 152 |
| 13C12-123678-HxCDF    | 69   | 26 - 123 |
| 13C12-234678-HxCDF    | 71   | 28 - 136 |
| 13C12-123789-HxCDF    | 69   | 29 - 147 |
| 13C12-1234678-HpCDF   | 73   | 28 - 143 |
| 13C12-1234789-HpCDF   | 69   | 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-025-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6157206  
**LLI Group #** 1224163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/06/2010 15:13 by PH

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

**Submitted:** 12/07/2010 09:45

**Reported:** 01/12/2011 20:21

D2545 SDG#: DX013-07

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

**Sample Description:** SL-025-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6157206  
**LLI Group #** 1224163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/06/2010 15:13 by PH

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

**Submitted:** 12/07/2010 09:45

**Reported:** 01/12/2011 20:21

D2545 SDG#: DX013-07

---

### 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      | 10349002     | 12/18/2010 18:49       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 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-025-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5C-SB-9.0-10.0

LLI Sample # SW 6157207  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 15:24 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D2591 SDG#: DX013-08

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.3        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-025-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5C-SB-9.0-10.0

LLI Sample # SW 6157207  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 15:24 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D2591 SDG#: DX013-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0331 JBQ   | 0.0218       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.133 JBQ    | 0.0280       | 5.51         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.173 JB     | 0.0336       | 5.51         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.742 JB     | 0.0336       | 5.51         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.404 JBQ    | 0.0333       | 5.51         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 34.4 B       | 0.0620       | 5.51         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 961 B        | 0.0788       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0393 JBQ   | 0.0265       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.160 JBQ    | 0.0179       | 5.51         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.183 JB     | 0.0155       | 5.51         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.202 JB     | 0.0283       | 5.51         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.188 JB     | 0.0278       | 5.51         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.166 JBQ    | 0.0315       | 5.51         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.199 JB     | 0.0287       | 5.51         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.04 JB      | 0.0190       | 5.51         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.261 JB     | 0.0249       | 5.51         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 5.48 JB      | 0.0357       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 48   | 25 - 164 |
| 13C12-12378-PeCDD     | 64   | 25 - 181 |
| 13C12-123478-HxCDD    | 60   | 32 - 141 |
| 13C12-123678-HxCDD    | 56   | 28 - 130 |
| 13C12-123789-HxCDD    | 59   | 28 - 130 |
| 13C12-1234678-HpCDD   | 58   | 23 - 140 |
| 13C12-OCDD            | 52   | 17 - 157 |
| 13C12-2378-TCDF       | 47   | 24 - 169 |
| 13C12-12378-PeCDF     | 60   | 24 - 185 |
| 13C12-23478-PeCDF     | 63   | 21 - 178 |
| 13C12-123478-HxCDF    | 56   | 26 - 152 |
| 13C12-123678-HxCDF    | 55   | 26 - 123 |
| 13C12-234678-HxCDF    | 55   | 28 - 136 |
| 13C12-123789-HxCDF    | 57   | 29 - 147 |
| 13C12-1234678-HpCDF   | 60   | 28 - 143 |
| 13C12-1234789-HpCDF   | 53   | 26 - 138 |
| 13C12-OCDF            | 45   | 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-025-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5C-SB-9.0-10.0

LLI Sample # SW 6157207  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 15:24 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D2591 SDG#: DX013-08

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

**Sample Description:** SL-025-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5C-SB-9.0-10.0

LLI Sample # SW 6157207  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 15:24 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D2591 SDG#: DX013-08

## 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      | 10349002     | 12/18/2010 19:46       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 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-024-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5C-SB-4.0-5.0

LLI Sample # SW 6157208  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 11:32 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D2445 SDG#: DX013-09

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.0        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-024-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6157208  
**LLI Group #** 1224163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/06/2010 11:32 by PH

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

**Submitted:** 12/07/2010 09:45

**Reported:** 01/12/2011 20:21

D2445 SDG#: DX013-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0444 JB    | 0.0232       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0196 U     | 0.0196       | 5.49         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0293 JBQ   | 0.0131       | 5.49         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0132 U     | 0.0132       | 5.49         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0414 JBQ   | 0.0133       | 5.49         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.162 JBQ    | 0.0186       | 5.49         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.733 JB     | 0.0242       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0198 U     | 0.0198       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0436 JBQ   | 0.0125       | 5.49         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0750 JB    | 0.0108       | 5.49         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0473 JB    | 0.0100       | 5.49         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0451 JB    | 0.00945      | 5.49         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0462 JBQ   | 0.0104       | 5.49         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0414 JBQ   | 0.00945      | 5.49         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.178 JB     | 0.00868      | 5.49         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0367 JBQ   | 0.0119       | 5.49         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.158 JBQ    | 0.0210       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 44   | 25 - 164 |
| 13C12-12378-PeCDD     | 73   | 25 - 181 |
| 13C12-123478-HxCDD    | 72   | 32 - 141 |
| 13C12-123678-HxCDD    | 71   | 28 - 130 |
| 13C12-123789-HxCDD    | 71   | 28 - 130 |
| 13C12-1234678-HpCDD   | 72   | 23 - 140 |
| 13C12-OCDD            | 62   | 17 - 157 |
| 13C12-2378-TCDF       | 43   | 24 - 169 |
| 13C12-12378-PeCDF     | 66   | 24 - 185 |
| 13C12-23478-PeCDF     | 70   | 21 - 178 |
| 13C12-123478-HxCDF    | 68   | 26 - 152 |
| 13C12-123678-HxCDF    | 69   | 26 - 123 |
| 13C12-234678-HxCDF    | 70   | 28 - 136 |
| 13C12-123789-HxCDF    | 71   | 29 - 147 |
| 13C12-1234678-HpCDF   | 75   | 28 - 143 |
| 13C12-1234789-HpCDF   | 65   | 26 - 138 |
| 13C12-OCDF            | 54   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 54   | 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

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

Page 3 of 4

**Sample Description:** SL-024-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5C-SB-4.0-5.0

LLI Sample # SW 6157208  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 11:32 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D2445 SDG#: DX013-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>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

Page 4 of 4

**Sample Description:** SL-024-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5C-SB-4.0-5.0

LLI Sample # SW 6157208  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 11:32 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D2445 SDG#: DX013-09

## 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      | 10349002     | 12/18/2010 20:43       | Nelson H Risser    | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines   | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10343162401A | 12/09/2010 08:36       | William C Schwebel | 1               |

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



# Analysis Report

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

Page 1 of 4

**Sample Description:** SL-024-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6157209  
**LLI Group #** 1224163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/06/2010 11:36 by PH

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

**Submitted:** 12/07/2010 09:45

**Reported:** 01/12/2011 20:21

D2491 SDG#: DX013-10

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 8.3        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-024-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5C-SB-9.0-10.0

LLI Sample # SW 6157209  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 11:36 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D2491 SDG#: DX013-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0230 U     | 0.0230       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0297 U     | 0.0297       | 5.45         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0286 JQ    | 0.0202       | 5.45         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0253 JBQ   | 0.0205       | 5.45         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0387 JB    | 0.0213       | 5.45         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.220 JBQ    | 0.0325       | 5.45         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.451 JBQ    | 0.0438       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0171 U     | 0.0171       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0292 JBQ   | 0.0112       | 5.45         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.132 JB     | 0.0106       | 5.45         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.104 JB     | 0.0203       | 5.45         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0885 JB    | 0.0180       | 5.45         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0949 JBQ   | 0.0245       | 5.45         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.135 JB     | 0.0192       | 5.45         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.538 JB     | 0.0180       | 5.45         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0955 JB    | 0.0246       | 5.45         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.378 JB     | 0.0456       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 55   | 25 - 164 |
| 13C12-12378-PeCDD     | 72   | 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            | 68   | 17 - 157 |
| 13C12-2378-TCDF       | 60   | 24 - 169 |
| 13C12-12378-PeCDF     | 74   | 24 - 185 |
| 13C12-23478-PeCDF     | 74   | 21 - 178 |
| 13C12-123478-HxCDF    | 77   | 26 - 152 |
| 13C12-123678-HxCDF    | 83   | 26 - 123 |
| 13C12-234678-HxCDF    | 76   | 28 - 136 |
| 13C12-123789-HxCDF    | 72   | 29 - 147 |
| 13C12-1234678-HpCDF   | 84   | 28 - 143 |
| 13C12-1234789-HpCDF   | 74   | 26 - 138 |
| 13C12-OCDF            | 66   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 65   | 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

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

Page 3 of 4

**Sample Description:** SL-024-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5C-SB-9.0-10.0

LLI Sample # SW 6157209  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 11:36 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D2491 SDG#: DX013-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>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

Page 4 of 4

**Sample Description:** SL-024-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6157209  
**LLI Group #** 1224163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/06/2010 11:36 by PH

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

**Submitted:** 12/07/2010 09:45

**Reported:** 01/12/2011 20:21

D2491 SDG#: DX013-10

## 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      | 10356002     | 12/28/2010 15:12       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10343162401A | 12/09/2010 08:36       | William C Schwebel  | 1               |

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



# Analysis Report

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

Page 1 of 4

**Sample Description:** SL-018-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA5C-SB-4.0-5.0

LLI Sample # SW 6157210  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 13:37 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D1845 SDG#: DX013-11

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-018-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6157210  
**LLI Group #** 1224163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/06/2010 13:37 by PH

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

**Submitted:** 12/07/2010 09:45

**Reported:** 01/12/2011 20:21

D1845 SDG#: DX013-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0152 JB    | 0.0137       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0655 JB    | 0.0251       | 5.70         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.118 JB     | 0.0296       | 5.70         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.640 JB     | 0.0303       | 5.70         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.354 JB     | 0.0308       | 5.70         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 15.5 B       | 0.0334       | 5.70         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 215 B        | 0.0537       | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0253 U     | 0.0253       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.123 JBQ    | 0.0151       | 5.70         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.176 JBQ    | 0.0138       | 5.70         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.155 JB     | 0.0219       | 5.70         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.124 JBQ    | 0.0211       | 5.70         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.170 JBQ    | 0.0222       | 5.70         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.158 JBQ    | 0.0211       | 5.70         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.02 JB      | 0.0214       | 5.70         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.225 JB     | 0.0257       | 5.70         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.72 JB      | 0.0233       | 11.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 69   | 25 - 164 |
| 13C12-12378-PeCDD     | 84   | 25 - 181 |
| 13C12-123478-HxCDD    | 77   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 75   | 28 - 130 |
| 13C12-1234678-HpCDD   | 76   | 23 - 140 |
| 13C12-OCDD            | 66   | 17 - 157 |
| 13C12-2378-TCDF       | 67   | 24 - 169 |
| 13C12-12378-PeCDF     | 80   | 24 - 185 |
| 13C12-23478-PeCDF     | 81   | 21 - 178 |
| 13C12-123478-HxCDF    | 73   | 26 - 152 |
| 13C12-123678-HxCDF    | 72   | 26 - 123 |
| 13C12-234678-HxCDF    | 73   | 28 - 136 |
| 13C12-123789-HxCDF    | 78   | 29 - 147 |
| 13C12-1234678-HpCDF   | 75   | 28 - 143 |
| 13C12-1234789-HpCDF   | 70   | 26 - 138 |
| 13C12-OCDF            | 59   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 74   | 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-018-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA5C-SB-4.0-5.0

LLI Sample # SW 6157210  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 13:37 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

D1845 SDG#: DX013-11

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

**Sample Description:** SL-018-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6157210  
**LLI Group #** 1224163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/06/2010 13:37 by PH

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

**Submitted:** 12/07/2010 09:45

**Reported:** 01/12/2011 20:21

D1845 SDG#: DX013-11

## 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      | 10349002     | 12/18/2010 21:39       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 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:** DUP12-SA5C-QC-120610 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP12-SA5C-QC-120610

LLI Sample # SW 6157211  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:57 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

DD912 SDG#: DX013-12FD\*

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 12.1       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** DUP12-SA5C-QC-120610 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP12-SA5C-QC-120610

LLI Sample # SW 6157211  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:57 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

DD912 SDG#: DX013-12FD\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0306 JBQ   | 0.0166       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.153 JB     | 0.0240       | 5.69         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.200 JBQ    | 0.0299       | 5.69         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.835 JB     | 0.0311       | 5.69         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.685 JB     | 0.0304       | 5.69         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 24.0 B       | 0.0402       | 5.69         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 366 B        | 0.0634       | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0284 JBQ   | 0.0251       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.132 JB     | 0.0155       | 5.69         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.181 JBQ    | 0.0143       | 5.69         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.246 JBQ    | 0.0258       | 5.69         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.189 JB     | 0.0249       | 5.69         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.157 JBQ    | 0.0283       | 5.69         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.246 JB     | 0.0253       | 5.69         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.14 JB      | 0.0447       | 5.69         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.316 JB     | 0.0545       | 5.69         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 7.28 JB      | 0.0262       | 11.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 72   | 25 - 164 |
| 13C12-12378-PeCDD     | 86   | 25 - 181 |
| 13C12-123478-HxCDD    | 77   | 32 - 141 |
| 13C12-123678-HxCDD    | 74   | 28 - 130 |
| 13C12-123789-HxCDD    | 76   | 28 - 130 |
| 13C12-1234678-HpCDD   | 78   | 23 - 140 |
| 13C12-OCDD            | 68   | 17 - 157 |
| 13C12-2378-TCDF       | 72   | 24 - 169 |
| 13C12-12378-PeCDF     | 82   | 24 - 185 |
| 13C12-23478-PeCDF     | 83   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 73   | 26 - 123 |
| 13C12-234678-HxCDF    | 74   | 28 - 136 |
| 13C12-123789-HxCDF    | 73   | 29 - 147 |
| 13C12-1234678-HpCDF   | 76   | 28 - 143 |
| 13C12-1234789-HpCDF   | 71   | 26 - 138 |
| 13C12-OCDF            | 61   | 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:** DUP12-SA5C-QC-120610 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP12-SA5C-QC-120610

LLI Sample # SW 6157211  
LLI Group # 1224163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/06/2010 09:57 by PH

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

Submitted: 12/07/2010 09:45

Reported: 01/12/2011 20:21

DD912 SDG#: DX013-12FD\*

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

**Sample Description:** DUP12-SA5C-QC-120610 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP12-SA5C-QC-120610

**LLI Sample #** SW 6157211  
**LLI Group #** 1224163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/06/2010 09:57 by PH

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

**Submitted:** 12/07/2010 09:45

**Reported:** 01/12/2011 20:21

**DD912 SDG#:** DX013-12FD\*

## 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      | 10349002     | 12/18/2010 22:36       | Nelson H Risser  | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10349002     | 12/15/2010 12:30       | Ginelle L Haines | 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: 01/12/11 at 08:21 PM

Group Number: 1224163

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: 10343162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6157208-6157209                  |             |           |              | 100      |           | 80-120          |     |         |
| Batch number: 10356162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6157206-6157207, 6157210-6157211 |             |           |              | 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: 10349002 | Sample number(s): 6157206-6157208, 6157210-6157211 |             |           |              |          |           |                 |     |         |
| 2378-TCDD              | 0.0213 J                                           | 0.0107      | 1.00      | ng/kg        | 97       |           | 67-158          |     |         |
| 12378-PeCDD            | 0.0359 J                                           | 0.0168      | 5.00      | ng/kg        | 100      |           | 70-142          |     |         |
| 123478-HxCDD           | 0.0243 J                                           | 0.0119      | 5.00      | ng/kg        | 102      |           | 70-164          |     |         |
| 123678-HxCDD           | 0.0229 J                                           | 0.0123      | 5.00      | ng/kg        | 101      |           | 76-134          |     |         |
| 123789-HxCDD           | 0.0240 J                                           | 0.0118      | 5.00      | ng/kg        | 101      |           | 64-162          |     |         |
| 1234678-HpCDD          | 0.0999 J                                           | 0.0140      | 5.00      | ng/kg        | 103      |           | 70-140          |     |         |
| OCDD                   | 0.159 J                                            | 0.0186      | 10.0      | ng/kg        | 102      |           | 78-144          |     |         |
| 2378-TCDF              | 0.0151 J                                           | 0.0118      | 1.00      | ng/kg        | 103      |           | 75-158          |     |         |
| 12378-PeCDF            | 0.0422 J                                           | 0.00930     | 5.00      | ng/kg        | 101      |           | 80-134          |     |         |
| 23478-PeCDF            | 0.0850 J                                           | 0.00910     | 5.00      | ng/kg        | 99       |           | 68-160          |     |         |
| 123478-HxCDF           | 0.0438 J                                           | 0.00940     | 5.00      | ng/kg        | 100      |           | 72-134          |     |         |
| 123678-HxCDF           | 0.0318 J                                           | 0.00870     | 5.00      | ng/kg        | 96       |           | 84-130          |     |         |
| 123789-HxCDF           | 0.0737 J                                           | 0.0101      | 5.00      | ng/kg        | 101      |           | 78-130          |     |         |
| 234678-HxCDF           | 0.0534 J                                           | 0.00920     | 5.00      | ng/kg        | 100      |           | 70-156          |     |         |
| 1234678-HpCDF          | 0.144 J                                            | 0.00710     | 5.00      | ng/kg        | 100      |           | 82-122          |     |         |
| 1234789-HpCDF          | 0.0527 J                                           | 0.00990     | 5.00      | ng/kg        | 102      |           | 78-138          |     |         |
| OCDF                   | 0.177 J                                            | 0.0195      | 10.0      | ng/kg        | 102      |           | 63-170          |     |         |
| Batch number: 10356002 | Sample number(s): 6157209                          |             |           |              |          |           |                 |     |         |
| 2378-TCDD              | 0.0474 J                                           | 0.0344      | 1.00      | ng/kg        | 100      |           | 67-158          |     |         |
| 12378-PeCDD            | 0.0795 J                                           | 0.0450      | 5.00      | ng/kg        | 103      |           | 70-142          |     |         |
| 123478-HxCDD           | 0.0374 U                                           | 0.0374      | 5.00      | ng/kg        | 101      |           | 70-164          |     |         |
| 123678-HxCDD           | 0.0718 J                                           | 0.0384      | 5.00      | ng/kg        | 101      |           | 76-134          |     |         |
| 123789-HxCDD           | 0.116 J                                            | 0.0378      | 5.00      | ng/kg        | 102      |           | 64-162          |     |         |
| 1234678-HpCDD          | 0.222 J                                            | 0.0532      | 5.00      | ng/kg        | 102      |           | 70-140          |     |         |
| OCDD                   | 0.397 J                                            | 0.0556      | 10.0      | ng/kg        | 100      |           | 78-144          |     |         |
| 2378-TCDF              | 0.0362 U                                           | 0.0362      | 1.00      | ng/kg        | 104      |           | 75-158          |     |         |
| 12378-PeCDF            | 0.111 J                                            | 0.0193      | 5.00      | ng/kg        | 103      |           | 80-134          |     |         |
| 23478-PeCDF            | 0.156 J                                            | 0.0222      | 5.00      | ng/kg        | 100      |           | 68-160          |     |         |
| 123478-HxCDF           | 0.228 J                                            | 0.0430      | 5.00      | ng/kg        | 98       |           | 72-134          |     |         |
| 123678-HxCDF           | 0.137 J                                            | 0.0326      | 5.00      | ng/kg        | 98       |           | 84-130          |     |         |
| 123789-HxCDF           | 0.279 J                                            | 0.0528      | 5.00      | ng/kg        | 98       |           | 78-130          |     |         |
| 234678-HpCDF           | 0.279 J                                            | 0.0370      | 5.00      | ng/kg        | 98       |           | 70-156          |     |         |
| 1234678-HpCDF          | 0.598 J                                            | 0.0272      | 5.00      | ng/kg        | 98       |           | 82-122          |     |         |
| 1234789-HpCDF          | 0.177 J                                            | 0.0542      | 5.00      | ng/kg        | 97       |           | 78-138          |     |         |
| OCDF                   | 0.559 J                                            | 0.0723      | 10.0      | ng/kg        | 99       |           | 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: 01/12/11 at 08:21 PM

Group Number: 1224163

| Analysis Name | Blank Result | Blank EDL** | Blank MRL | Report Units | OPR %REC | OPRD %REC | OPR/OPRD Limits | RPD | RPD Max |
|---------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
|---------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|

### 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: 10343162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6157208-6157209 BKG: P148500<br>7.2 7.0 2 20                  |          |               |     |         |          |          |         |             |
| Batch number: 10356162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6157206-6157207, 6157210-6157211 BKG: P157195<br>9.4 9.8 4 20 |          |               |     |         |          |          |         |             |
| Batch number: 10349002                                      | Sample number(s): 6157206-6157208, 6157210-6157211 UNSPK: P156156               |          |               |     |         |          |          |         |             |
| 2378-TCDD                                                   | 96                                                                              | 97       | 67-158        | 1   | 25      |          |          |         |             |
| 12378-PeCDD                                                 | 99                                                                              | 100      | 70-142        | 0   | 25      |          |          |         |             |
| 123478-HxCDD                                                | 100                                                                             | 102      | 70-164        | 2   | 25      |          |          |         |             |
| 123678-HxCDD                                                | 99                                                                              | 100      | 76-134        | 1   | 25      |          |          |         |             |
| 123789-HxCDD                                                | 99                                                                              | 99       | 64-162        | 0   | 25      |          |          |         |             |
| 1234678-HpCDD                                               | 99                                                                              | 100      | 70-140        | 1   | 25      |          |          |         |             |
| OCDD                                                        | 98                                                                              | 96       | 78-144        | 2   | 25      |          |          |         |             |
| 2378-TCDF                                                   | 97                                                                              | 98       | 75-158        | 1   | 25      |          |          |         |             |
| 12378-PeCDF                                                 | 98                                                                              | 100      | 80-134        | 2   | 25      |          |          |         |             |
| 23478-PeCDF                                                 | 99                                                                              | 99       | 68-160        | 1   | 25      |          |          |         |             |
| 123478-HxCDF                                                | 98                                                                              | 97       | 72-134        | 1   | 25      |          |          |         |             |
| 123678-HxCDF                                                | 98                                                                              | 99       | 84-130        | 1   | 25      |          |          |         |             |
| 123789-HxCDF                                                | 97                                                                              | 98       | 78-130        | 1   | 25      |          |          |         |             |
| 234678-HxCDF                                                | 99                                                                              | 100      | 70-156        | 1   | 25      |          |          |         |             |
| 1234678-HpCDF                                               | 97                                                                              | 97       | 82-122        | 0   | 25      |          |          |         |             |
| 1234789-HpCDF                                               | 101                                                                             | 100      | 78-138        | 1   | 25      |          |          |         |             |
| OCDF                                                        | 99                                                                              | 100      | 63-170        | 1   | 25      |          |          |         |             |
| Batch number: 10356002                                      | Sample number(s): 6157209 UNSPK: P162889                                        |          |               |     |         |          |          |         |             |
| 2378-TCDD                                                   | 100                                                                             | 100      | 67-158        | 0   | 25      |          |          |         |             |
| 12378-PeCDD                                                 | 102                                                                             | 102      | 70-142        | 1   | 25      |          |          |         |             |
| 123478-HxCDD                                                | 106                                                                             | 104      | 70-164        | 2   | 25      |          |          |         |             |
| 123678-HxCDD                                                | 104                                                                             | 102      | 76-134        | 2   | 25      |          |          |         |             |
| 123789-HxCDD                                                | 105                                                                             | 105      | 64-162        | 0   | 25      |          |          |         |             |
| 1234678-HpCDD                                               | 120                                                                             | 102      | 70-140        | 14  | 25      |          |          |         |             |
| OCDD                                                        | 318*                                                                            | 107      | 78-144        | 72* | 25      |          |          |         |             |
| 2378-TCDF                                                   | 105                                                                             | 105      | 75-158        | 0   | 25      |          |          |         |             |
| 12378-PeCDF                                                 | 105                                                                             | 103      | 80-134        | 2   | 25      |          |          |         |             |
| 23478-PeCDF                                                 | 103                                                                             | 103      | 68-160        | 1   | 25      |          |          |         |             |
| 123478-HxCDF                                                | 101                                                                             | 100      | 72-134        | 1   | 25      |          |          |         |             |
| 123678-HxCDF                                                | 99                                                                              | 100      | 84-130        | 1   | 25      |          |          |         |             |
| 123789-HxCDF                                                | 100                                                                             | 100      | 78-130        | 0   | 25      |          |          |         |             |
| 234678-HxCDF                                                | 102                                                                             | 99       | 70-156        | 3   | 25      |          |          |         |             |
| 1234678-HpCDF                                               | 101                                                                             | 99       | 82-122        | 1   | 25      |          |          |         |             |
| 1234789-HpCDF                                               | 101                                                                             | 99       | 78-138        | 1   | 25      |          |          |         |             |
| OCDF                                                        | 105                                                                             | 100      | 63-170        | 4   | 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: 01/12/11 at 08:21 PM

Group Number: 1224163

### 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: 10349002

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6157206 | 69              | 84                | 72                 | 69                 | 71                 | 69                 |
| 6157207 | 48              | 63                | 56                 | 55                 | 55                 | 57                 |
| 6157208 | 44              | 70                | 68                 | 69                 | 70                 | 71                 |
| 6157210 | 69              | 81                | 73                 | 72                 | 73                 | 78                 |
| 6157211 | 72              | 83                | 74                 | 73                 | 74                 | 73                 |
| Blank   | 69              | 73                | 67                 | 69                 | 67                 | 65                 |
| MS      | 75              | 84                | 75                 | 74                 | 76                 | 80                 |
| MSD     | 61              | 67                | 63                 | 62                 | 62                 | 61                 |
| OPR     | 78              | 81                | 73                 | 77                 | 74                 | 74                 |

|         |                     |                     |            |                       |                   |                    |
|---------|---------------------|---------------------|------------|-----------------------|-------------------|--------------------|
| 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 |

|         |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|
| 6157206 | 73 | 69 | 59 | 79 | 84 | 75 |
| 6157207 | 60 | 53 | 45 | 71 | 64 | 60 |
| 6157208 | 75 | 65 | 54 | 54 | 73 | 72 |
| 6157210 | 75 | 70 | 59 | 74 | 84 | 77 |
| 6157211 | 76 | 71 | 61 | 79 | 86 | 77 |
| Blank   | 77 | 62 | 52 | 79 | 76 | 73 |
| MS      | 81 | 72 | 61 | 82 | 87 | 81 |
| MSD     | 70 | 59 | 51 | 67 | 70 | 66 |
| OPR     | 85 | 65 | 54 | 87 | 88 | 83 |

|         |                    |                    |                     |            |                 |                   |
|---------|--------------------|--------------------|---------------------|------------|-----------------|-------------------|
| 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 |

|         |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|
| 6157206 | 70 | 72 | 73 | 64 | 74 | 80 |
| 6157207 | 56 | 59 | 58 | 52 | 47 | 60 |
| 6157208 | 71 | 71 | 72 | 62 | 43 | 66 |
| 6157210 | 73 | 75 | 76 | 66 | 67 | 80 |
| 6157211 | 74 | 76 | 78 | 68 | 72 | 82 |
| Blank   | 70 | 71 | 73 | 63 | 68 | 75 |
| MS      | 77 | 80 | 80 | 69 | 73 | 84 |
| MSD     | 62 | 65 | 67 | 60 | 61 | 68 |
| OPR     | 78 | 80 | 79 | 69 | 76 | 85 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 28-130 | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |
|---------|--------|--------|--------|--------|--------|--------|

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

Batch number: 10356002

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6157209 | 55              | 74                | 77                 | 83                 | 76                 | 72                 |
| Blank   | 49              | 47                | 42                 | 53                 | 46                 | 39                 |
| MS      | 57              | 73                | 67                 | 71                 | 66                 | 67                 |
| MSD     | 60              | 79                | 80                 | 81                 | 79                 | 76                 |
| OPR     | 52              | 71                | 68                 | 73                 | 68                 | 66                 |

\*- 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: 01/12/11 at 08:21 PM

Group Number: 1224163

### Surrogate Quality Control

| Limits: | 25-164              | 21-178              | 26-152              | 26-123                   | 28-136            | 29-147             |
|---------|---------------------|---------------------|---------------------|--------------------------|-------------------|--------------------|
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF          | 13C12-1278-TCDD<br>(CRS) | 13C12-12378-PeCDD | 13C12-123478-HxCDD |
| 6157209 | 84                  | 74                  | 66                  | 65                       | 72                | 75                 |
| Blank   | 74                  | 44                  | 43                  | 44                       | 54                | 53                 |
| MS      | 73                  | 67                  | 63                  | 63                       | 69                | 64                 |
| MSD     | 85                  | 81                  | 77                  | 68                       | 75                | 76                 |
| OPR     | 82                  | 69                  | 65                  | 66                       | 69                | 71                 |
| 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  |
| 6157209 | 75                  | 74                  | 74                  | 68                       | 60                | 74                 |
| Blank   | 53                  | 54                  | 61                  | 58                       | 39                | 55                 |
| MS      | 64                  | 64                  | 66                  | 64                       | 62                | 74                 |
| MSD     | 77                  | 74                  | 79                  | 76                       | 67                | 77                 |
| OPR     | 69                  | 69                  | 72                  | 70                       | 58                | 70                 |
| 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

13013 1224163 6157206-211

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING |           |                                         |        |                              |                              | VOCs/EPA 8260B | 1,4 Dioxane EPA 8260SIM | SVOCs EPA 8270C & PAHs 8270 SIM | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6950 | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B | **pH EPA 9045C | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B       | Other Instructions and Notes |
|-------------------------------------------|-----------|-----------------------------------------|--------|------------------------------|------------------------------|----------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|----------------------|--------------------------|--------------------|------------------------|---------------------|----------------|------------------------|---------------------|----------------------------|------------------------------|
| SAMPLE NUMBER                             | DATE      | TIME                                    | MATRIX | Preservative                 | Type & No. of Containers     |                |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| DUP12-SA5C-QC-120610                      | 12.6.10   | 0957                                    | soil   | none                         | 3-4 oz. jars                 |                |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| DUP12-SA5C-QC-120610                      | 12.6.10   | 0957                                    | soil   | none                         | 5 Encore samplers            | X              | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     | X              | X                      |                     |                            |                              |
| SL-018-SA5C-SB-4.0-5.0                    | 12.6.10   | 1337                                    | soil   | none                         | 3-4 oz. jars                 |                |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     | X              | X                      |                     |                            |                              |
| SL-018-SA5C-SB-4.5                        | 12.6.10   | 1333                                    | soil   | none                         | 5 Encore samplers            | X              | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| SL-028-SA5C-SB-4.0-5.0MS                  | 12.6.10   | 0950                                    | soil   | none                         | 9-4 oz. jars                 |                |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     | X              | X                      |                     |                            |                              |
| SL-028-SA5C-SB-4.5MS                      | 12.6.10   | 0950                                    | soil   | none                         | 15 Encore samplers           | X              | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| SL-024-SA5C-SB-4.5                        | 12.6.10   | 1128                                    | soil   | none                         | 4 Encore samplers            | X              | X                       |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| TB-120610                                 | 12.6.10   | 1630                                    | water  | HCl                          | 4-40 ml vials                | X              | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| SL-025-SA5C-SB-4.0-5.0                    | 12.6.10   | 1513                                    | soil   | none                         | 2-16 oz. jars                |                |                         | X                               |                   | X                      | X                            | X                     | X                   | X              | X                       | X                      |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| SL-025-SA5C-SB-4.0-5.0                    | 12.6.10   | 1513                                    | soil   | none                         | 1-16 oz. jars                |                |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        | X                                    | X                    | X                        | X                  | X                      | X                   | X              |                        |                     |                            |                              |
| SL-025-SA5C-SB-4.5                        | 12.6.10   | 1510                                    | soil   | none                         | 5 Encore samplers            | X              | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| SL-025-SA5C-SB-4.0-5.0                    | 12.6.10   | 1513                                    | soil   | none                         | 2-4 oz. jars                 |                |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                | X                      | X                   | forgot to fill a third jar |                              |
| SL-025-SA5C-SB-9.0-10.0                   | 12.6.10   | 1524                                    | soil   | none                         | 2-16 oz. jars                |                |                         | X                               |                   | X                      | X                            | X                     | X                   | X              | X                       |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| SL-025-SA5C-SB-9.0-10.0                   | 12.6.10   | 1524                                    | soil   | none                         | 1-16 oz. jars                |                |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        | X                                    | X                    | X                        | X                  | X                      | X                   | X              |                        |                     |                            |                              |
| SL-025-SA5C-SB-9.5                        | 12.6.10   | 1524                                    | soil   | none                         | 5 Encore samplers            | X              | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| SL-025-SA5C-SB-9.0-10.0                   | 12.6.10   | 1524                                    | soil   | none                         | 3-4 oz. jars                 |                |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                | X                      | X                   |                            |                              |
| Relinquished by: (Signature)              | Date/Time | Received for Laboratory by: (Signature) |        | Date/Time                    | Laboratory:                  |                |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
| Received by: (Signature)                  | Date/Time | Airtel No.                              |        |                              | Lancaster Laboratories, Inc. |                |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |
|                                           |           |                                         |        | Tracking Number 869514318174 |                              | Cooler 2       |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                     |                |                        |                     |                            |                              |

13013

1224163

6157206-11

## CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |         |      |        |              |                          | CHAIN OF CUSTODY RECORD |                         |                                                            |                   |                        |                              |                       |                     |                |                         |                              |                                      |                      |                          |                    |                        | Other Instructions and Notes |                     |                |                        |                     |                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|--------|--------------|--------------------------|-------------------------|-------------------------|------------------------------------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------------|--------------------------------------|----------------------|--------------------------|--------------------|------------------------|------------------------------|---------------------|----------------|------------------------|---------------------|----------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |         |      |        |              |                          | VOCs/EPA 8260B          | 1,4-Dioxane EPA 8260S/M | SVCs EPA 8270C & PAHs 8270 SIM                             | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0       | Perchlorate Confirmation by EPA 6850 | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A |                              | **Cyanide EPA 9012B | **pH EPA 9045C | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                             | DATE    | TIME | MATRIX | Preservative | Type & No. of Containers |                         |                         |                                                            |                   |                        |                              |                       |                     |                |                         |                              |                                      |                      |                          |                    |                        |                              |                     |                |                        |                     |                      |
| SL-024-SASC-SB-4.0-5.0                                                                                                                                                    | 12.6.10 | 1132 | soil   | none         | 2-16 oz. jars            |                         |                         | X                                                          |                   |                        | X                            | X                     | X                   | X              | X                       | X                            |                                      |                      |                          |                    |                        |                              |                     |                |                        |                     |                      |
| SL-024-SASC-SB-9.0-10.0                                                                                                                                                   | 12.6.10 | 1136 | soil   | none         | 2-16 oz. jars            |                         |                         | X                                                          |                   |                        | X                            | X                     | X                   | X              | X                       | X                            |                                      |                      |                          |                    |                        |                              |                     |                |                        |                     |                      |
| SL-018-SASC-SB-4.0-5.0                                                                                                                                                    | 12.6.10 | 1337 | soil   | none         | 2-16 oz. jars            |                         |                         | X                                                          |                   |                        | X                            | X                     | X                   | X              | X                       | X                            |                                      |                      |                          |                    |                        |                              |                     |                |                        |                     |                      |
| SL-018-SASC-SB-4.0-5.0                                                                                                                                                    | 12.6.10 | 1337 | soil   | none         | 1-16 oz. jar             |                         |                         |                                                            |                   |                        |                              |                       |                     |                |                         |                              |                                      | X                    | X                        | X                  | X                      | X                            | X                   | X              |                        |                     |                      |
| SL-028-SASC-SB-4.0-5.0MS                                                                                                                                                  | 12.6.10 | 0950 | soil   | none         | 6-16 oz. jars            |                         |                         | X                                                          |                   |                        |                              |                       | X                   |                |                         |                              |                                      |                      |                          |                    |                        |                              |                     |                |                        |                     |                      |
| SL-028-SASC-SB-4.0-5.0MS                                                                                                                                                  | 12.6.10 | 0950 | soil   | none         | 3-16 oz. jars            |                         |                         |                                                            |                   |                        |                              |                       |                     |                |                         |                              |                                      | X                    | X                        | X                  | X                      | X                            | X                   | X              |                        |                     |                      |
| DUP12-SASC-QC-120610                                                                                                                                                      | 12.6.10 | 0957 | soil   | none         | 2-16 oz. jars            |                         |                         | X                                                          |                   |                        | X                            | X                     | X                   | X              | X                       | X                            |                                      |                      |                          |                    |                        |                              |                     |                |                        |                     |                      |
| DUP12-SASC-QC-120610                                                                                                                                                      | 12.6.10 | 0957 | soil   | none         | 1-16 oz. jar             |                         |                         |                                                            |                   |                        |                              |                       |                     |                |                         |                              |                                      | X                    | X                        | X                  | X                      | X                            | X                   | X              |                        |                     |                      |
| PB 12/6/10                                                                                                                                                                |         |      |        |              |                          |                         |                         |                                                            |                   |                        |                              |                       |                     |                |                         |                              |                                      |                      |                          |                    |                        |                              |                     |                |                        |                     |                      |
| Relinquished by: (Signature) <i>[Signature]</i>                                                                                                                           |         |      |        |              |                          | Date/Time               |                         | Received for Laboratory by: (Signature) <i>[Signature]</i> |                   |                        |                              |                       |                     | Date/Time      |                         | Laboratory:                  |                                      |                      |                          |                    |                        |                              |                     |                |                        |                     |                      |
| Received by: (Signature) <i>[Signature]</i>                                                                                                                               |         |      |        |              |                          | Date/Time               |                         | Appl. No.                                                  |                   |                        |                              |                       |                     |                |                         | Lancaster Laboratories, Inc. |                                      |                      |                          |                    |                        |                              |                     |                |                        |                     |                      |
|                                                                                                                                                                           |         |      |        |              |                          |                         |                         | Tracking Number 870059364628                               |                   |                        |                              |                       |                     |                |                         | Cooler 1                     |                                      |                      |                          |                    |                        |                              |                     |                |                        |                     |                      |

870059364628

# Explanation of Symbols and Abbreviations

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

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | 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.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | 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. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | 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

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

### Inorganic Qualifiers

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

January 28, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/08/2010

Group Number: 1224333

SDG: DX014

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-026-SA5C-SB-4.0-5.0 Soil      | 6158240                       |
| SL-026-SA5C-SB-9.0-10.0 Soil     | 6158241                       |
| SL-027-SA5C-SB-2.5-3.5 Soil      | 6158242                       |
| SL-027-SA5C-SB-9.0-10.0 Soil     | 6158243                       |
| SL-019-SA5C-SB-4.0-5.0 Soil      | 6158244                       |
| SL-019-SA5C-SB-8.5-9.5 Soil      | 6158245                       |
| SL-014-SA5C-SB-4.0-5.0 Soil      | 6158246                       |
| SL-014-SA5C-SB-9.0-10.0 Soil     | 6158247                       |
| EB13-SA5C-120710 Water           | 6158248                       |

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,



Charles J. Neslund  
Manager



# Analysis Report

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

Page 1 of 4

**Sample Description:** SL-026-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA5C-SB-4.0-5.0

LLI Sample # SW 6158240  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 09:30 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2645 SDG#: DX014-01

| CAT No. | Analysis Name                               | CAS Number              | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---------------------------------------------|-------------------------|------------|-----------------------------|---------------------------|-----------------|
| 11625   | Wet Chemistry 28a Moisture Content by 160.3 | EPA 160.3 modified n.a. | % 9.0      | % 0.50                      | % 0.50                    | 1               |

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

**Sample Description:** SL-026-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6158240  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 09:30 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

D2645 SDG#: DX014-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0314 JBQ   | 0.0134       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0527 J     | 0.0186       | 5.49         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0329 J     | 0.0201       | 5.49         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.153 JBQ    | 0.0199       | 5.49         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.217 J      | 0.0201       | 5.49         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.266 JBQ    | 0.0204       | 5.49         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.892 JB     | 0.0214       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0140 U     | 0.0140       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0788 JBQ   | 0.0126       | 5.49         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.103 JBQ    | 0.0111       | 5.49         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0877 JB    | 0.0186       | 5.49         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0981 JB    | 0.0180       | 5.49         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.178 JB     | 0.0198       | 5.49         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.148 JBQ    | 0.0177       | 5.49         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.425 JB     | 0.0116       | 5.49         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.105 JBQ    | 0.0153       | 5.49         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.294 JBQ    | 0.0208       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 70   | 25 - 164 |
| 13C12-12378-PeCDD     | 81   | 25 - 181 |
| 13C12-123478-HxCDD    | 77   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 75   | 28 - 130 |
| 13C12-1234678-HpCDD   | 76   | 23 - 140 |
| 13C12-OCDD            | 66   | 17 - 157 |
| 13C12-2378-TCDF       | 70   | 24 - 169 |
| 13C12-12378-PeCDF     | 78   | 24 - 185 |
| 13C12-23478-PeCDF     | 80   | 21 - 178 |
| 13C12-123478-HxCDF    | 73   | 26 - 152 |
| 13C12-123678-HxCDF    | 72   | 26 - 123 |
| 13C12-234678-HxCDF    | 74   | 28 - 136 |
| 13C12-123789-HxCDF    | 75   | 29 - 147 |
| 13C12-1234678-HpCDF   | 75   | 28 - 143 |
| 13C12-1234789-HpCDF   | 68   | 26 - 138 |
| 13C12-OCDF            | 56   | 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



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-026-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA5C-SB-4.0-5.0

LLI Sample # SW 6158240  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 09:30 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2645 SDG#: DX014-01

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

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

**Sample Description:** SL-026-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA5C-SB-4.0-5.0

LLI Sample # SW 6158240  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 09:30 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2645 SDG#: DX014-01

## 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      | 10350001     | 12/19/2010 04:29       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10350001     | 12/16/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10354162401B | 12/20/2010 16:51       | 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-026-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA5C-SB-9.0-10.0

LLI Sample # SW 6158241  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 09:35 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2691 SDG#: DX014-02

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 12.1       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-026-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA5C-SB-9.0-10.0

LLI Sample # SW 6158241  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 09:35 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2691 SDG#: DX014-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0394 JBQ   | 0.0160       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0228 JQ    | 0.0151       | 5.69         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0341 JQ    | 0.0152       | 5.69         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0839 JBQ   | 0.0152       | 5.69         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0827 JQ    | 0.0159       | 5.69         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.338 JB     | 0.0191       | 5.69         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.997 JB     | 0.0206       | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0148 U     | 0.0148       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0425 JBQ   | 0.0123       | 5.69         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.115 JB     | 0.0111       | 5.69         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.114 JBQ    | 0.0188       | 5.69         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0854 JBQ   | 0.0173       | 5.69         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0956 JB    | 0.0200       | 5.69         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.169 JBQ    | 0.0175       | 5.69         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.809 JB     | 0.0118       | 5.69         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.111 JB     | 0.0154       | 5.69         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.418 JB     | 0.0217       | 11.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 67   | 25 - 164 |
| 13C12-12378-PeCDD     | 80   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 72   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 74   | 23 - 140 |
| 13C12-OCDD            | 63   | 17 - 157 |
| 13C12-2378-TCDF       | 68   | 24 - 169 |
| 13C12-12378-PeCDF     | 76   | 24 - 185 |
| 13C12-23478-PeCDF     | 78   | 21 - 178 |
| 13C12-123478-HxCDF    | 71   | 26 - 152 |
| 13C12-123678-HxCDF    | 70   | 26 - 123 |
| 13C12-234678-HxCDF    | 73   | 28 - 136 |
| 13C12-123789-HxCDF    | 70   | 29 - 147 |
| 13C12-1234678-HpCDF   | 74   | 28 - 143 |
| 13C12-1234789-HpCDF   | 68   | 26 - 138 |
| 13C12-OCDF            | 57   | 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-026-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA5C-SB-9.0-10.0

LLI Sample # SW 6158241  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 09:35 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2691 SDG#: DX014-02

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

**Sample Description:** SL-026-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6158241  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 09:35 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

D2691 SDG#: DX014-02

## 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      | 10350001     | 12/19/2010 05:25       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10350001     | 12/16/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10354162401B | 12/20/2010 16:51       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** SL-027-SA5C-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA5C-SB-2.5-3.5

LLI Sample # SW 6158242  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 11:23 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2723 SDG#: DX014-03

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 10.3       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-027-SA5C-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA5C-SB-2.5-3.5

LLI Sample # SW 6158242  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 11:23 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2723 SDG#: DX014-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0262 JBQ   | 0.0129       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0501 JQ    | 0.0208       | 5.57         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0271 JQ    | 0.0165       | 5.57         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.146 JB     | 0.0168       | 5.57         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.252 J      | 0.0164       | 5.57         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.350 JBQ    | 0.0196       | 5.57         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.88 JB      | 0.0241       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0267 J     | 0.0158       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0716 JB    | 0.0117       | 5.57         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.128 JBQ    | 0.0106       | 5.57         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.126 JBQ    | 0.0197       | 5.57         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.114 JB     | 0.0194       | 5.57         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.255 JB     | 0.0215       | 5.57         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.166 JB     | 0.0190       | 5.57         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.764 JB     | 0.0110       | 5.57         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0762 JB    | 0.0157       | 5.57         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.447 JB     | 0.0222       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 73   | 25 - 164 |
| 13C12-12378-PeCDD     | 90   | 25 - 181 |
| 13C12-123478-HxCDD    | 82   | 32 - 141 |
| 13C12-123678-HxCDD    | 78   | 28 - 130 |
| 13C12-123789-HxCDD    | 79   | 28 - 130 |
| 13C12-1234678-HpCDD   | 77   | 23 - 140 |
| 13C12-OCDD            | 66   | 17 - 157 |
| 13C12-2378-TCDF       | 75   | 24 - 169 |
| 13C12-12378-PeCDF     | 85   | 24 - 185 |
| 13C12-23478-PeCDF     | 88   | 21 - 178 |
| 13C12-123478-HxCDF    | 77   | 26 - 152 |
| 13C12-123678-HxCDF    | 75   | 26 - 123 |
| 13C12-234678-HxCDF    | 77   | 28 - 136 |
| 13C12-123789-HxCDF    | 78   | 29 - 147 |
| 13C12-1234678-HpCDF   | 77   | 28 - 143 |
| 13C12-1234789-HpCDF   | 65   | 26 - 138 |
| 13C12-OCDF            | 52   | 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-027-SA5C-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA5C-SB-2.5-3.5

LLI Sample # SW 6158242  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 11:23 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2723 SDG#: DX014-03

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

**Sample Description:** SL-027-SA5C-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA5C-SB-2.5-3.5

**LLI Sample #** SW 6158242  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 11:23 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

D2723 SDG#: DX014-03

## 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      | 10350001     | 12/19/2010 06:22       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10350001     | 12/16/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10354162401B | 12/20/2010 16:51       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-027-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA5C-SB-9.0-10.0

LLI Sample # SW 6158243  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 11:25 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2791 SDG#: DX014-04

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 12.4       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-027-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA5C-SB-9.0-10.0

LLI Sample # SW 6158243  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 11:25 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2791 SDG#: DX014-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0211 JBQ   | 0.0171       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0502 JQ    | 0.0211       | 5.71         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0272 JQ    | 0.0152       | 5.71         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0216 JB    | 0.0151       | 5.71         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0418 JQ    | 0.0150       | 5.71         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.299 JB     | 0.0189       | 5.71         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.03 JB      | 0.0386       | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0148 U     | 0.0148       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0547 JB    | 0.0137       | 5.71         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.113 JB     | 0.0126       | 5.71         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.124 JBQ    | 0.0188       | 5.71         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0933 JBQ   | 0.0175       | 5.71         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0745 JBQ   | 0.0200       | 5.71         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.169 JB     | 0.0178       | 5.71         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.687 JB     | 0.0110       | 5.71         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0922 JBQ   | 0.0150       | 5.71         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.370 JB     | 0.0252       | 11.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 67   | 25 - 164 |
| 13C12-12378-PeCDD     | 81   | 25 - 181 |
| 13C12-123478-HxCDD    | 79   | 32 - 141 |
| 13C12-123678-HxCDD    | 75   | 28 - 130 |
| 13C12-123789-HxCDD    | 77   | 28 - 130 |
| 13C12-1234678-HpCDD   | 77   | 23 - 140 |
| 13C12-OCDD            | 65   | 17 - 157 |
| 13C12-2378-TCDF       | 67   | 24 - 169 |
| 13C12-12378-PeCDF     | 78   | 24 - 185 |
| 13C12-23478-PeCDF     | 80   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 74   | 26 - 123 |
| 13C12-234678-HxCDF    | 75   | 28 - 136 |
| 13C12-123789-HxCDF    | 74   | 29 - 147 |
| 13C12-1234678-HpCDF   | 79   | 28 - 143 |
| 13C12-1234789-HpCDF   | 67   | 26 - 138 |
| 13C12-OCDF            | 55   | 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-027-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA5C-SB-9.0-10.0

LLI Sample # SW 6158243  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 11:25 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D2791 SDG#: DX014-04

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

**Sample Description:** SL-027-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6158243  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 11:25 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

D2791 SDG#: DX014-04

## 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      | 10350001     | 12/19/2010 07:18       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10350001     | 12/16/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10354162401B | 12/20/2010 16:51       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** SL-019-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5C-SB-4.0-5.0

LLI Sample # SW 6158244  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 13:55 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D1945 SDG#: DX014-05

| 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.       | 10.2       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-019-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6158244  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 13:55 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

D1945 SDG#: DX014-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0208 JBQ   | 0.0149       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0176 U     | 0.0176       | 5.57         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0227 JQ    | 0.0147       | 5.57         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0853 JB    | 0.0146       | 5.57         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0900 J     | 0.0150       | 5.57         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.574 JB     | 0.0210       | 5.57         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 5.35 JB      | 0.0232       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0156 U     | 0.0156       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0739 JBQ   | 0.0119       | 5.57         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0895 JB    | 0.0112       | 5.57         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0834 JBQ   | 0.0164       | 5.57         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0684 JB    | 0.0159       | 5.57         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0865 JBQ   | 0.0182       | 5.57         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.118 JBQ    | 0.0159       | 5.57         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.488 JB     | 0.0111       | 5.57         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0505 JBQ   | 0.0153       | 5.57         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.321 JBQ    | 0.0183       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 67   | 25 - 164 |
| 13C12-12378-PeCDD     | 82   | 25 - 181 |
| 13C12-123478-HxCDD    | 77   | 32 - 141 |
| 13C12-123678-HxCDD    | 74   | 28 - 130 |
| 13C12-123789-HxCDD    | 77   | 28 - 130 |
| 13C12-1234678-HpCDD   | 77   | 23 - 140 |
| 13C12-OCDD            | 68   | 17 - 157 |
| 13C12-2378-TCDF       | 67   | 24 - 169 |
| 13C12-12378-PeCDF     | 78   | 24 - 185 |
| 13C12-23478-PeCDF     | 79   | 21 - 178 |
| 13C12-123478-HxCDF    | 72   | 26 - 152 |
| 13C12-123678-HxCDF    | 72   | 26 - 123 |
| 13C12-234678-HxCDF    | 73   | 28 - 136 |
| 13C12-123789-HxCDF    | 71   | 29 - 147 |
| 13C12-1234678-HpCDF   | 79   | 28 - 143 |
| 13C12-1234789-HpCDF   | 66   | 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-019-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6158244  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 13:55 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D1945 SDG#: DX014-05

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

**Sample Description:** SL-019-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6158244  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 13:55 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

D1945 SDG#: DX014-05

## 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      | 10350001     | 12/19/2010 08:15       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10350001     | 12/16/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10354162401B | 12/20/2010 16:51       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** SL-019-SA5C-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5C-SB-8.5-9.5

LLI Sample # SW 6158245  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 14:04 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D1989 SDG#: DX014-06

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 10.3       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-019-SA5C-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5C-SB-8.5-9.5

**LLI Sample #** SW 6158245  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 14:04 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

D1989 SDG#: DX014-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0123 U     | 0.0123       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0227 JQ    | 0.0147       | 5.57         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0278 JQ    | 0.0139       | 5.57         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.108 JB     | 0.0144       | 5.57         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.130 JQ     | 0.0137       | 5.57         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.227 JB     | 0.0166       | 5.57         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.804 JB     | 0.0224       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0123 U     | 0.0123       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0384 JBQ   | 0.0100       | 5.57         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0914 JBQ   | 0.00936      | 5.57         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0740 JB    | 0.0149       | 5.57         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0991 JB    | 0.0137       | 5.57         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0513 JBQ   | 0.0173       | 5.57         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.113 JB     | 0.0140       | 5.57         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.450 JB     | 0.0100       | 5.57         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0735 JB    | 0.0139       | 5.57         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.236 JBQ    | 0.0215       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 68   | 25 - 164 |
| 13C12-12378-PeCDD     | 81   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 72   | 28 - 130 |
| 13C12-123789-HxCDD    | 75   | 28 - 130 |
| 13C12-1234678-HpCDD   | 72   | 23 - 140 |
| 13C12-OCDD            | 63   | 17 - 157 |
| 13C12-2378-TCDF       | 67   | 24 - 169 |
| 13C12-12378-PeCDF     | 78   | 24 - 185 |
| 13C12-23478-PeCDF     | 79   | 21 - 178 |
| 13C12-123478-HxCDF    | 70   | 26 - 152 |
| 13C12-123678-HxCDF    | 72   | 26 - 123 |
| 13C12-234678-HxCDF    | 70   | 28 - 136 |
| 13C12-123789-HxCDF    | 65   | 29 - 147 |
| 13C12-1234678-HpCDF   | 75   | 28 - 143 |
| 13C12-1234789-HpCDF   | 62   | 26 - 138 |
| 13C12-OCDF            | 50   | 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-019-SA5C-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5C-SB-8.5-9.5

LLI Sample # SW 6158245  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 14:04 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D1989 SDG#: DX014-06

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

**Sample Description:** SL-019-SA5C-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5C-SB-8.5-9.5

**LLI Sample #** SW 6158245  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 14:04 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

D1989 SDG#: DX014-06

## 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      | 10350001     | 12/19/2010 09:12       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10350001     | 12/16/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10354162401B | 12/20/2010 16:51       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** SL-014-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5C-SB-4.0-5.0

LLI Sample # SW 6158246  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 15:29 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D1445 SDG#: DX014-07

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-014-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5C-SB-4.0-5.0

LLI Sample # SW 6158246  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 15:29 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D1445 SDG#: DX014-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0198 JB    | 0.0149       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0992 JQ    | 0.0257       | 5.46         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.108 JQ     | 0.0259       | 5.46         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.668 JB     | 0.0282       | 5.46         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.274 J      | 0.0264       | 5.46         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 17.5 B       | 0.0348       | 5.46         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 185 B        | 0.0511       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0904 J     | 0.0329       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.238 JB     | 0.0209       | 5.46         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.631 JB     | 0.0188       | 5.46         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.275 JB     | 0.0294       | 5.46         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.183 JB     | 0.0274       | 5.46         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.202 JBQ    | 0.0326       | 5.46         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.284 JBQ    | 0.0279       | 5.46         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.71 JB      | 0.0176       | 5.46         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.273 JB     | 0.0226       | 5.46         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 7.12 JB      | 0.0263       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 71   | 25 - 164 |
| 13C12-12378-PeCDD     | 83   | 25 - 181 |
| 13C12-123478-HxCDD    | 74   | 32 - 141 |
| 13C12-123678-HxCDD    | 67   | 28 - 130 |
| 13C12-123789-HxCDD    | 69   | 28 - 130 |
| 13C12-1234678-HpCDD   | 69   | 23 - 140 |
| 13C12-OCDD            | 59   | 17 - 157 |
| 13C12-2378-TCDF       | 68   | 24 - 169 |
| 13C12-12378-PeCDF     | 78   | 24 - 185 |
| 13C12-23478-PeCDF     | 82   | 21 - 178 |
| 13C12-123478-HxCDF    | 69   | 26 - 152 |
| 13C12-123678-HxCDF    | 68   | 26 - 123 |
| 13C12-234678-HxCDF    | 68   | 28 - 136 |
| 13C12-123789-HxCDF    | 65   | 29 - 147 |
| 13C12-1234678-HpCDF   | 69   | 28 - 143 |
| 13C12-1234789-HpCDF   | 59   | 26 - 138 |
| 13C12-OCDF            | 50   | 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-014-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5C-SB-4.0-5.0

LLI Sample # SW 6158246  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 15:29 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D1445 SDG#: DX014-07

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

**Sample Description:** SL-014-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6158246  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 15:29 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

D1445 SDG#: DX014-07

## 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      | 10350001     | 12/19/2010 10:08       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10350001     | 12/16/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10354162401B | 12/20/2010 16:51       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** SL-014-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5C-SB-9.0-10.0

LLI Sample # SW 6158247  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 15:35 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D1491 SDG#: DX014-08

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.0        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-014-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5C-SB-9.0-10.0

LLI Sample # SW 6158247  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 15:35 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D1491 SDG#: DX014-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0442 JB    | 0.0125       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.112 J      | 0.0188       | 5.49         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0902 J     | 0.0268       | 5.49         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.405 JB     | 0.0274       | 5.49         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.242 J      | 0.0262       | 5.49         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 12.7 B       | 0.0326       | 5.49         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 186 B        | 0.0488       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0220 U     | 0.0220       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.207 JB     | 0.0149       | 5.49         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.321 JB     | 0.0140       | 5.49         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.251 JB     | 0.0210       | 5.49         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.238 JB     | 0.0198       | 5.49         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.188 JB     | 0.0214       | 5.49         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.320 JB     | 0.0198       | 5.49         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.45 JB      | 0.0134       | 5.49         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.240 JB     | 0.0165       | 5.49         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.90 JB      | 0.0218       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 80   | 25 - 164 |
| 13C12-12378-PeCDD     | 90   | 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            | 67   | 17 - 157 |
| 13C12-2378-TCDF       | 79   | 24 - 169 |
| 13C12-12378-PeCDF     | 88   | 24 - 185 |
| 13C12-23478-PeCDF     | 88   | 21 - 178 |
| 13C12-123478-HxCDF    | 76   | 26 - 152 |
| 13C12-123678-HxCDF    | 75   | 26 - 123 |
| 13C12-234678-HxCDF    | 77   | 28 - 136 |
| 13C12-123789-HxCDF    | 80   | 29 - 147 |
| 13C12-1234678-HpCDF   | 77   | 28 - 143 |
| 13C12-1234789-HpCDF   | 71   | 26 - 138 |
| 13C12-OCDF            | 61   | 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-014-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5C-SB-9.0-10.0

LLI Sample # SW 6158247  
LLI Group # 1224333  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/07/2010 15:35 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

D1491 SDG#: DX014-08

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

**Sample Description:** SL-014-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6158247  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 15:35 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

D1491 SDG#: DX014-08

## 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      | 10350001     | 12/19/2010 11:05       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10350001     | 12/16/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10354162401B | 12/20/2010 16:51       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** EB13-SA5C-120710 Water  
SSFL Area IV Collocated Soil Sampling  
EB13-SA5C-120710

**LLI Sample #** WW 6158248  
**LLI Group #** 1224333  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/07/2010 13:00 by PH

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

**Submitted:** 12/08/2010 09:30

**Reported:** 01/28/2011 16:55

**DEB13 SDG#:** DX014-09EB\*

| 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  | 1.30               | J  | 0.794            | 2.14            | 1               |
| 10915          | 12378-PeCDD   | 40321-76-4 | 0.744              | U  | 0.744            | 10.7            | 1               |
| 10915          | 123478-HxCDD  | 39227-28-6 | 1.07               | JB | 0.507            | 10.7            | 1               |
| 10915          | 123678-HxCDD  | 57653-85-7 | 0.967              | JB | 0.507            | 10.7            | 1               |
| 10915          | 123789-HxCDD  | 19408-74-3 | 0.690              | JB | 0.529            | 10.7            | 1               |
| 10915          | 1234678-HpCDD | 35822-46-9 | 4.79               | JB | 0.591            | 10.7            | 1               |
| 10915          | OCDD          | 3268-87-9  | 8.42               | JB | 0.990            | 21.4            | 1               |
| 10915          | 2378-TCDF     | 51207-31-9 | 0.308              | U  | 0.308            | 2.14            | 1               |
| 10915          | 12378-PeCDF   | 57117-41-6 | 1.19               | JB | 0.420            | 10.7            | 1               |
| 10915          | 23478-PeCDF   | 57117-31-4 | 1.38               | JB | 0.336            | 10.7            | 1               |
| 10915          | 123478-HxCDF  | 70648-26-9 | 2.41               | JB | 0.475            | 10.7            | 1               |
| 10915          | 123678-HxCDF  | 57117-44-9 | 1.81               | JB | 0.464            | 10.7            | 1               |
| 10915          | 123789-HxCDF  | 72918-21-9 | 2.01               | JB | 0.463            | 10.7            | 1               |
| 10915          | 234678-HxCDF  | 60851-34-5 | 2.64               | JB | 0.418            | 10.7            | 1               |
| 10915          | 1234678-HpCDF | 67562-39-4 | 10.5               | JB | 0.462            | 10.7            | 1               |
| 10915          | 1234789-HpCDF | 55673-89-7 | 2.31               | JB | 0.581            | 10.7            | 1               |
| 10915          | OCDF          | 39001-02-0 | 5.83               | JB | 0.728            | 21.4            | 1               |

The method blank and OPR associated with this sample had recoveries of some labeled compounds that were outside method limits. The sample was re-extracted outside the client specified holding time on an extraction batch with compliant recoveries in the method blank and OPR.

This sample also had low recoveries for some of the labeled compounds. Comparable results were not observed between the two extractions. The results for both extractions are presented in the data package.

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 13   | 25 - 164 |
| 13C12-12378-PeCDD     | 17   | 25 - 181 |
| 13C12-123478-HxCDD    | 15   | 32 - 141 |
| 13C12-123678-HxCDD    | 15   | 28 - 130 |
| 13C12-123789-HxCDD    | 15   | 28 - 130 |
| 13C12-1234678-HpCDD   | 14   | 23 - 140 |
| 13C12-OCDD            | 12   | 17 - 157 |
| 13C12-2378-TCDF       | 25   | 24 - 169 |
| 13C12-12378-PeCDF     | 19   | 24 - 185 |
| 13C12-23478-PeCDF     | 21   | 21 - 178 |
| 13C12-123478-HxCDF    | 16   | 26 - 152 |
| 13C12-123678-HxCDF    | 15   | 26 - 123 |
| 13C12-234678-HxCDF    | 16   | 28 - 136 |
| 13C12-123789-HxCDF    | 17   | 29 - 147 |
| 13C12-1234678-HpCDF   | 15   | 28 - 143 |
| 13C12-1234789-HpCDF   | 14   | 26 - 138 |
| 13C12-OCDF            | 11   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 46   | 35 - 197 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

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

**Sample Description:** **EB13-SA5C-120710 Water**  
**SSFL Area IV Collocated Soil Sampling**  
**EB13-SA5C-120710**

**LLI Sample # WW 6158248**  
**LLI Group # 1224333**  
**Account # 13013**

**Project Name: SSFL Area IV Collocated Soil Sampling**

Collected: 12/07/2010 13:00 by PH

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

Submitted: 12/08/2010 09:30

Reported: 01/28/2011 16:55

DEB13 SDG#: DX014-09EB\*

| CAT No. | Analysis Name                                                               | CAS Number | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|---------|-----------------------------------------------------------------------------|------------|--------------------|------------------|-----------------|-----------------|
| 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                                              |            |                    |                  |                 |                 |

## 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      | 10349001 | 12/21/2010 15:37       | Nelson H Risser  | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 1      | 10349001 | 12/15/2010 06:40       | Ginelle L Haines | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 2      | 11018003 | 01/19/2011 06:00       | Ginelle L Haines | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 01/28/11 at 04:55 PM

Group Number: 1224333

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: 10354162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6158240-6158247 |             |           |              | 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: 10349001 | Sample number(s): 6158248 |             |           |              |          |           |                 |     |         |
| 2378-TCDD              | 0.748 U                   | 0.748       | 2.00      | pg/l         | 105      |           | 67-158          |     |         |
| 12378-PeCDD            | 1.56 J                    | 0.597       | 10.0      | pg/l         | 115      |           | 70-142          |     |         |
| 123478-HxCDD           | 1.17 J                    | 0.417       | 10.0      | pg/l         | 124      |           | 70-164          |     |         |
| 123678-HxCDD           | 0.874 J                   | 0.439       | 10.0      | pg/l         | 119      |           | 76-134          |     |         |
| 123789-HxCDD           | 1.40 J                    | 0.428       | 10.0      | pg/l         | 120      |           | 64-162          |     |         |
| 1234678-HpCDD          | 3.15 J                    | 0.580       | 10.0      | pg/l         | 125      |           | 70-140          |     |         |
| OCDD                   | 6.75 J                    | 0.712       | 20.0      | pg/l         | 134      |           | 78-144          |     |         |
| 2378-TCDF              | 0.414 J                   | 0.376       | 2.00      | pg/l         | 98       |           | 75-158          |     |         |
| 12378-PeCDF            | 1.22 J                    | 0.366       | 10.0      | pg/l         | 111      |           | 80-134          |     |         |
| 23478-PeCDF            | 1.70 J                    | 0.326       | 10.0      | pg/l         | 109      |           | 68-160          |     |         |
| 123478-HxCDF           | 1.35 J                    | 0.343       | 10.0      | pg/l         | 119      |           | 72-134          |     |         |
| 123678-HxCDF           | 1.31 J                    | 0.343       | 10.0      | pg/l         | 122      |           | 84-130          |     |         |
| 123789-HxCDF           | 1.86 J                    | 0.379       | 10.0      | pg/l         | 118      |           | 78-130          |     |         |
| 234678-HxCDF           | 1.72 J                    | 0.329       | 10.0      | pg/l         | 115      |           | 70-156          |     |         |
| 1234678-HpCDF          | 5.79 J                    | 0.346       | 10.0      | pg/l         | 125*     |           | 82-122          |     |         |
| 1234789-HpCDF          | 2.97 J                    | 0.451       | 10.0      | pg/l         | 129      |           | 78-138          |     |         |
| OCDF                   | 3.65 J                    | 0.750       | 20.0      | pg/l         | 133      |           | 63-170          |     |         |

|                        |                                   |         |      |       |    |  |        |  |  |
|------------------------|-----------------------------------|---------|------|-------|----|--|--------|--|--|
| Batch number: 10350001 | Sample number(s): 6158240-6158247 |         |      |       |    |  |        |  |  |
| 2378-TCDD              | 0.0235 J                          | 0.0118  | 1.00 | ng/kg | 83 |  | 67-158 |  |  |
| 12378-PeCDD            | 0.0151 U                          | 0.0151  | 5.00 | ng/kg | 86 |  | 70-142 |  |  |
| 123478-HxCDD           | 0.0103 U                          | 0.0103  | 5.00 | ng/kg | 87 |  | 70-164 |  |  |
| 123678-HxCDD           | 0.0153 J                          | 0.0100  | 5.00 | ng/kg | 84 |  | 76-134 |  |  |
| 123789-HxCDD           | 0.0103 U                          | 0.0103  | 5.00 | ng/kg | 85 |  | 64-162 |  |  |
| 1234678-HpCDD          | 0.182 J                           | 0.0159  | 5.00 | ng/kg | 85 |  | 70-140 |  |  |
| OCDD                   | 0.426 J                           | 0.0208  | 10.0 | ng/kg | 86 |  | 78-144 |  |  |
| 2378-TCDF              | 0.0125 U                          | 0.0125  | 1.00 | ng/kg | 85 |  | 75-158 |  |  |
| 12378-PeCDF            | 0.0284 J                          | 0.00960 | 5.00 | ng/kg | 85 |  | 80-134 |  |  |
| 23478-PeCDF            | 0.0923 J                          | 0.00900 | 5.00 | ng/kg | 84 |  | 68-160 |  |  |
| 123478-HxCDF           | 0.0974 J                          | 0.0139  | 5.00 | ng/kg | 86 |  | 72-134 |  |  |
| 123678-HxCDF           | 0.0608 J                          | 0.0127  | 5.00 | ng/kg | 84 |  | 84-130 |  |  |
| 123789-HxCDF           | 0.0534 J                          | 0.0135  | 5.00 | ng/kg | 85 |  | 78-130 |  |  |
| 234678-HxCDF           | 0.113 J                           | 0.0126  | 5.00 | ng/kg | 85 |  | 70-156 |  |  |
| 1234678-HpCDF          | 0.435 J                           | 0.0103  | 5.00 | ng/kg | 85 |  | 82-122 |  |  |
| 1234789-HpCDF          | 0.0587 J                          | 0.0134  | 5.00 | ng/kg | 86 |  | 78-138 |  |  |
| OCDF                   | 0.286 J                           | 0.0191  | 10.0 | ng/kg | 84 |  | 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: 01/28/11 at 04:55 PM

Group Number: 1224333

### 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<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc          | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-------------------------------------------------------------|------------|-------------|------------------|-----|------------|----------------------|-------------|------------|----------------|
| Batch number: 10354162401B<br>28a Moisture Content by 160.3 |            |             |                  |     |            |                      |             |            |                |
| Sample number(s): 6158240-6158247                           |            |             |                  |     |            | BKG: P158227<br>12.4 | 12.9        | 3          | 20             |

### Surrogate Quality Control

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

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

Batch number: 10349001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF  | 13C12-123678-HxCDF       | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|---------------------|--------------------------|--------------------|--------------------|
| 6158248 | 13*                 | 21                  | 16*                 | 15*                      | 16*                | 17*                |
| Blank   | 11*                 | 19*                 | 18*                 | 17*                      | 18*                | 17*                |
| OPR     | 18*                 | 33                  | 30                  | 29                       | 30                 | 28*                |
| Limits: | 25-164              | 21-178              | 26-152              | 26-123                   | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF          | 13C12-1278-TCDD<br>(CRS) | 13C12-12378-PeCDD  | 13C12-123478-HxCDD |
| 6158248 | 15*                 | 14*                 | 11*                 | 46                       | 17*                | 15*                |
| Blank   | 16*                 | 15*                 | 12*                 | 20*                      | 16*                | 17*                |
| OPR     | 27*                 | 24*                 | 18                  | 31*                      | 29                 | 30*                |
| 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  |
| 6158248 | 15*                 | 15*                 | 14*                 | 12*                      | 25                 | 19*                |
| Blank   | 16*                 | 17*                 | 16*                 | 12*                      | 18*                | 18*                |
| OPR     | 28                  | 27*                 | 26                  | 19                       | 29                 | 31                 |
| Limits: | 28-130              | 28-130              | 23-140              | 17-157                   | 24-169             | 24-185             |

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

Batch number: 10350001

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6158240 | 70              | 80                | 73                 | 72                 | 74                 | 75                 |
| 6158241 | 67              | 78                | 71                 | 70                 | 73                 | 70                 |
| 6158242 | 73              | 88                | 77                 | 75                 | 77                 | 78                 |
| 6158243 | 67              | 80                | 74                 | 74                 | 75                 | 74                 |
| 6158244 | 67              | 79                | 72                 | 72                 | 73                 | 71                 |
| 6158245 | 68              | 79                | 70                 | 72                 | 70                 | 65                 |
| 6158246 | 71              | 82                | 69                 | 68                 | 68                 | 65                 |
| 6158247 | 80              | 88                | 76                 | 75                 | 77                 | 80                 |
| Blank   | 72              | 81                | 71                 | 72                 | 73                 | 78                 |
| OPR     | 72              | 83                | 73                 | 72                 | 74                 | 74                 |

\*- 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: 01/28/11 at 04:55 PM

Group Number: 1224333

### Surrogate Quality Control

| Limits: | 25-164              | 21-178              | 26-152              | 26-123                   | 28-136            | 29-147             |
|---------|---------------------|---------------------|---------------------|--------------------------|-------------------|--------------------|
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF          | 13C12-1278-TCDD<br>(CRS) | 13C12-12378-PeCDD | 13C12-123478-HxCDD |
| 6158240 | 75                  | 68                  | 56                  | 81                       | 81                | 77                 |
| 6158241 | 74                  | 68                  | 57                  | 77                       | 80                | 75                 |
| 6158242 | 77                  | 65                  | 52                  | 84                       | 90                | 82                 |
| 6158243 | 79                  | 67                  | 55                  | 75                       | 81                | 79                 |
| 6158244 | 79                  | 66                  | 56                  | 77                       | 82                | 77                 |
| 6158245 | 75                  | 62                  | 50                  | 77                       | 81                | 75                 |
| 6158246 | 69                  | 59                  | 50                  | 80                       | 83                | 74                 |
| 6158247 | 77                  | 71                  | 61                  | 86                       | 90                | 81                 |
| Blank   | 77                  | 67                  | 57                  | 85                       | 83                | 77                 |
| OPR     | 77                  | 67                  | 51                  | 84                       | 84                | 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  |
| 6158240 | 73                  | 75                  | 76                  | 66                       | 70                | 78                 |
| 6158241 | 72                  | 74                  | 74                  | 63                       | 68                | 76                 |
| 6158242 | 78                  | 79                  | 77                  | 66                       | 75                | 85                 |
| 6158243 | 75                  | 77                  | 77                  | 65                       | 67                | 78                 |
| 6158244 | 74                  | 77                  | 77                  | 68                       | 67                | 78                 |
| 6158245 | 72                  | 75                  | 72                  | 63                       | 67                | 78                 |
| 6158246 | 67                  | 69                  | 69                  | 59                       | 68                | 78                 |
| 6158247 | 76                  | 79                  | 78                  | 67                       | 79                | 88                 |
| Blank   | 75                  | 77                  | 77                  | 66                       | 71                | 81                 |
| OPR     | 73                  | 77                  | 77                  | 65                       | 72                | 80                 |
|         |                     |                     |                     |                          |                   |                    |
| 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 1224333 6158240-48

## CHAIN OF CUSTODY RECORD

## CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

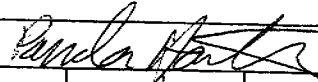
## NOTES:

\*Primary Analyses as indicated on sample labels

\*\*Secondary Analyses as indicated on sample labels

@ For hex chrome analysis, lab will measure pH and ORP

Samplers: (Signature)



| SAMPLE NUMBER | DATE | TIME | MATRIX | Preservative | Type & No. of Containers |
|---------------|------|------|--------|--------------|--------------------------|
|---------------|------|------|--------|--------------|--------------------------|

|                         |         |      |      |      |                 |
|-------------------------|---------|------|------|------|-----------------|
| SL-026-SA5C-SB-4.0-5.0  | 12/7/10 | 0930 | soil | none | 2 x 16 oz. jars |
| SL-026-SA5C-SB-4.0-5.0  | 12/7/10 | 0930 | soil | none | 1 x 16 oz. jar  |
| SL-026-SA5C-SB-9.0-10.0 | 12/7/10 | 0935 | soil | none | 2 x 16 oz. jars |
| SL-026-SA5C-SB-9.0-10.0 | 12/7/10 | 0935 | soil | none | 1 x 16 oz. jar  |
| SL-027-SA5C-SB-2.5-3.5  | 12/7/10 | 1123 | soil | none | 2 x 16 oz. jars |
| SL-027-SA5C-SB-2.5-3.5  | 12/7/10 | 1123 | soil | none | 1 x 16 oz. jar  |
| SL-027-SA5C-SB-9.0-10.0 | 12/7/10 | 1125 | soil | none | 2 x 16 oz. jars |
| SL-027-SA5C-SB-9.0-10.0 | 12/7/10 | 1125 | soil | none | 1 x 16 oz. jar  |
| SL-019-SA5C-SB-4.0-5.0  | 12/7/10 | 1355 | soil | none | 2 x 16 oz. jars |
| SL-019-SA5C-SB-4.0-5.0  | 12/7/10 | 1355 | soil | none | 1 x 16 oz. jar  |
| SL-019-SA5C-SB-8.5-9.5  | 12/7/10 | 1404 | soil | none | 2 x 16 oz. jars |
| SL-019-SA5C-SB-8.5-9.5  | 12/7/10 | 1404 | soil | none | 1 x 16 oz. jar  |
| SL-014-SA5C-SB-4.0-5.0  | 12/7/10 | 1529 | soil | none | 1 x 16 oz. jar  |
| SL-014-SA5C-SB-9.0-10.0 | 12/7/10 | 1535 | soil | none | 1 x 16 oz. jar  |

VOCs/EPA 8260B

1,4-Dioxane EPA 8260SIM

SVOCs EPA 8270C &amp; PAHs 8270 SIM

TPH-GRO EPA 8015B

TPH-EFH EPA 8015B Mod.

\*Metals EPA 6010/6020B&amp;7471A

\*Hex Chrome EPA 7199\*

\*Fluoride EPA 300.0

\*PCBs EPA 8082

\*Dioxin/Furan EPA 1613B

\*Perchlorate EPA 314.0

Perchlorate Confirmation by EPA 6850

\*\*Nitrates EPA 300.0

\*\*Formaldehyde EPA 8315A

\*\*n-NDMA EPA 1625C

\*\*Energetics EPA 8330A

\*\*Cyanide EPA 9012B

\*\*pH EPA 9045C

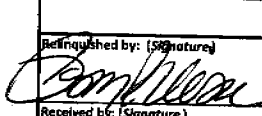
\*\*Terphenyls EPA 8015B

\*\*Glycols EPA 8015B

\*\*Alcohols EPA 8015B

Other Instructions and Notes

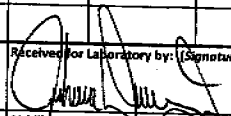
Relinquished by: (Signature)



Date/Time

12.07.10 1630

Received for Laboratory by: (Signature)



Date/Time

12/10/10 1530

Received by: (Signature)

Date/Time

Airbill No.

00732992

Tracking Number 869514318185

Laboratory:

Lancaster Laboratories, Inc.

Cooler 1

869514318185

13013 1224333 6158240-48

## CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |         |                            |        |                                                            |                          | VOCs/EPA 8260B               | 1,4-Dioxane EPA 8260SIM | SVOCs EPA 8270C & PAHs 8270 SIM | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Glycols EPA 8015B | **Alcohols EPA 8015B | Other Instructions and Notes                |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------------|--------|------------------------------------------------------------|--------------------------|------------------------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|---------------------|----------------------|---------------------------------------------|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |         |                            |        |                                                            |                          |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| Samplers: (Signature) <i>Ramela Antman</i>                                                                                                                                |         |                            |        |                                                            |                          |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| SAMPLE NUMBER                                                                                                                                                             | DATE    | TIME                       | MATRIX | Preservative                                               | Type & No. of Containers |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| SL-026-SA5C-SB-4.0-5.0                                                                                                                                                    | 12/7/10 | 0930                       | soil   | none                                                       | 3 x 16 oz. jars          |                              |                         |                                 |                   | X                      |                              |                       |                     |                |                         |                        |                                      |                                           |                                          | X                   | X                    |                                             |  |
| SL-026-SA5C-SB-9.0-10.0                                                                                                                                                   | 12/7/10 | 0935                       | soil   | none                                                       | 3 x 16 oz. jars          |                              |                         |                                 |                   | X                      |                              |                       |                     |                |                         |                        |                                      |                                           |                                          | X                   | X                    |                                             |  |
| SL-027-SA5C-SB-2.5-3.5                                                                                                                                                    | 12/7/10 | 1123                       | soil   | none                                                       | 3 x 16 oz. jars          |                              |                         |                                 |                   | X                      |                              |                       |                     |                |                         |                        |                                      |                                           |                                          | X                   | X                    |                                             |  |
| SL-027-SA5C-SB-9.0-10.0                                                                                                                                                   | 12/7/10 | 1125                       | soil   | none                                                       | 3 x 16 oz. jars          |                              |                         |                                 |                   | X                      |                              |                       |                     |                |                         |                        |                                      |                                           |                                          | X                   | X                    |                                             |  |
| SL-019-SA5C-SB-4.0-5.0                                                                                                                                                    | 12/7/10 | 1355                       | soil   | none                                                       | 3 x 16 oz. jars          |                              |                         |                                 |                   | X                      |                              |                       |                     |                |                         |                        |                                      |                                           |                                          | X                   | X                    |                                             |  |
| SL-019-SA5C-SB-8.5-9.5                                                                                                                                                    | 12/7/10 | 1404                       | soil   | none                                                       | 3 x 16 oz. jars          |                              |                         |                                 |                   | X                      |                              |                       |                     |                |                         |                        |                                      |                                           |                                          | X                   | X                    |                                             |  |
| SL-019-SA5C-SB-4.5                                                                                                                                                        | 12/7/10 | 1350                       | soil   | none                                                       | 5 Encore samplers        | X                            | X                       |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| SL-019-SA5C-SB-9.0                                                                                                                                                        | 12/7/10 | 1400                       | soil   | none                                                       | 5 Encore samplers        | X                            | X                       |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| SL-026-SA5C-SB-4.5                                                                                                                                                        | 12/7/10 | 0925                       | soil   | none                                                       | 5 Encore samplers        | X                            | X                       |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| SL-026-SA5C-SB-9.5                                                                                                                                                        | 12/7/10 | 0933                       | soil   | none                                                       | 5 Encore samplers        | X                            | X                       |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| SL-027-SA5C-SB-3.0                                                                                                                                                        | 12/7/10 | 1115                       | soil   | none                                                       | 5 Encore samplers        | X                            | X                       |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| SL-027-SA5C-SB-9.5                                                                                                                                                        | 12/7/10 | 1122                       | soil   | none                                                       | 5 Encore samplers        | X                            | X                       |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| TB-120910                                                                                                                                                                 | 12/7/10 | 1630                       | water  | HCl                                                        | 4-40 ml vials            | X                            | X                       |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| EB13-SA5C-120710                                                                                                                                                          | 12/7/10 | 1300                       | water  | HCl                                                        | 6-40 ml vials            | X                            | X                       |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| SL-014-SA5C-SB-4.5                                                                                                                                                        | 12/7/10 | 1525                       | soil   | none                                                       | 5 Encore samplers        | X                            | X                       |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| SL-014-SA5C-SB-9.5                                                                                                                                                        | 12/7/10 | 1533                       | soil   | none                                                       | 5 Encore samplers        | X                            | X                       |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |
| Relinquished by: (Signature) <i>[Signature]</i>                                                                                                                           |         | Date/Time<br>12.07.10 1630 |        | Received for Laboratory by: (Signature) <i>[Signature]</i> |                          | Date/Time<br>12.07.10 0930   |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      | Laboratory:<br>Lancaster Laboratories, Inc. |  |
| Received by: (Signature)                                                                                                                                                  |         | Date/Time                  |        | Airbill No.<br>00782992                                    |                          |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          | Cooler 2            |                      |                                             |  |
|                                                                                                                                                                           |         |                            |        |                                                            |                          | Tracking Number 869514318196 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                           |                                          |                     |                      |                                             |  |

13013 1224333 6158240-48

## CHAIN OF CUSTODY RECORD

| CDM                                                    |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                  |                          |                                                            |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      | Other Instructions and Notes |                      |                              |  |
|--------------------------------------------------------|---------|---------------------------------------|--------|------------------|--------------------------|------------------------------------------------------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|------------------------------|----------------------|------------------------------|--|
| 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 |         |                                       |        |                  |                          |                                                            |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                              |                      |                              |  |
| Samplers: (Signature) <i>Ramela H. H. H.</i>           |         |                                       |        |                  |                          |                                                            |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                              |                      |                              |  |
| SAMPLE NUMBER                                          | DATE    | TIME                                  | MATRIX | Preservative     | Type & No. of Containers | VOCs/EPA 8260B                                             | 1,4-Dioxane EPA 8260SIM | SVOCS EPA 8270C & PAHs 8270 SIM | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | **Glycols EPA 8015B          | **Alcohols EPA 8015B |                              |  |
| EB13-SA5C-120710                                       | 12/7/10 | 1300                                  | water  | none             | 6 - 1 Liter amber glass  |                                                            |                         | X                               |                   |                        |                              |                       |                     | X              | X                       |                        |                                      |                              |                      |                              |  |
| EB13-SA5C-120710                                       | 12/7/10 | 1300                                  | water  | none             | 1 - 500 mL poly bottle   |                                                            |                         |                                 |                   |                        |                              | X                     | X                   |                |                         | X                      |                                      |                              |                      |                              |  |
| EB13-SA5C-120710                                       | 12/7/10 | 1300                                  | water  | HNO <sub>3</sub> | 1 - 500 mL poly bottle   |                                                            |                         |                                 |                   |                        | X                            |                       |                     |                |                         |                        |                                      |                              |                      |                              |  |
| SL-014-SA5C-SB-9.0-10.0                                | 12/7/10 | 1535                                  | soil   | none             | 2x16 oz. jars            |                                                            |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                              |                      |                              |  |
| SL-014-SA5C-SB-4.0-5.0                                 | 12/7/10 | 1529                                  | soil   | none             | 2x16 oz. jars            |                                                            |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                              |                      |                              |  |
| SL-014-SA5C-SB-9.0-10.0                                | 12/7/10 | 1535                                  | soil   | none             | 3x4 oz. jars             |                                                            |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      | X                            | X                    |                              |  |
| SL-014-SA5C-SB-4.0-5.0                                 | 12/7/10 | 1529                                  | soil   | none             | 3x4 oz. jars             |                                                            |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      | X                            | X                    |                              |  |
| <i>Relinquished 12/7/10</i>                            |         |                                       |        |                  |                          |                                                            |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                              |                      |                              |  |
| Relinquished by: (Signature) <i>[Signature]</i>        |         |                                       |        |                  |                          |                                                            |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                              |                      | Laboratory:                  |  |
| Date/Time 12.07.10 1630                                |         |                                       |        |                  |                          | Received for Laboratory by: (Signature) <i>[Signature]</i> |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                              |                      | Date/Time 12/7/10 0930       |  |
| Received by: (Signature) <i>[Signature]</i>            |         |                                       |        |                  |                          | Airbill No. 00732992                                       |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                              |                      | Lancaster Laboratories, Inc. |  |
|                                                        |         |                                       |        |                  |                          | Tracking Number 869514318200                               |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                              |                      | Cooler 3                     |  |

869514318200

# Explanation of Symbols and Abbreviations

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

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | 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.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | 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. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | 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 |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | 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

January 28, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/10/2010

Group Number: 1225036

SDG: DX017

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-015-SA5C-SB-4.0-5.0 Soil      | 6162881                       |
| SL-015-SA5C-SB-9.0-10.0 Soil     | 6162882                       |
| SL-020-SA5C-SB-4.0-5.0 Soil      | 6162883                       |
| SL-020-SA5C-SB-7.5-8.5 Soil      | 6162884                       |
| SL-016-SA5C-SB-4.0-5.0 Soil      | 6162885                       |
| SL-016-SA5C-SB-9.0-10.0 Soil     | 6162886                       |
| SL-021-SA5C-SB-4.0-5.0 Soil      | 6162887                       |
| SL-021-SA5C-SB-9.0-10.0 Soil     | 6162888                       |
| SL-017-SA5B-SS-0.0-0.5 Soil      | 6162889                       |
| SL-017-SA5B-SS-0.0-0.5MS Soil    | 6162890                       |
| SL-017-SA5B-SS-0.0-0.5MSD Soil   | 6162891                       |
| EB-01-SA5B-120910 Water          | 6162892                       |
| SL-029-SA5B-SS-0.0-0.5 Soil      | 6162893                       |
| SL-034-SA5B-SS-0.0-0.5 Soil      | 6162894                       |
| SL-035-SA5B-SS-0.0-0.5 Soil      | 6162895                       |
| SL-036-SA5B-SS-0.0-0.5 Soil      | 6162896                       |
| SL-022-SA5C-SB-4.0-5.0 Soil      | 6162897                       |
| SL-022-SA5C-SB-9.0-10.0 Soil     | 6162898                       |
| SL-012-SA5C-SB-4.0-5.0 Soil      | 6162899                       |
| SL-012-SA5C-SB-9.0-10.0 Soil     | 6162900                       |
| SL-013-SA5C-SB-4.0-5.0 Soil      | 6162901                       |
| SL-013-SA5C-SB-9.0-10.0 Soil     | 6162902                       |

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,



Charles J. Neslund  
Manager



# 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-015-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5C-SB-4.0-5.0

LLI Sample # SW 6162881  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:33

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1701 SDG#: DX017-01

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.5        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-015-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5C-SB-4.0-5.0

LLI Sample # SW 6162881  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:33

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1701 SDG#: DX017-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0186 U     | 0.0186       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0714 JB    | 0.0296       | 5.52         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0748 JQ    | 0.0254       | 5.52         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.261 JB     | 0.0261       | 5.52         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.330 JB     | 0.0270       | 5.52         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 4.95 JB      | 0.0326       | 5.52         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 43.2 B       | 0.0360       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0448 J     | 0.0230       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.299 JBQ    | 0.0130       | 5.52         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.219 JB     | 0.0128       | 5.52         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.194 JB     | 0.0199       | 5.52         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.182 JB     | 0.0186       | 5.52         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.252 JBQ    | 0.0229       | 5.52         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.278 JB     | 0.0188       | 5.52         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.66 JB      | 0.0170       | 5.52         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.169 JBQ    | 0.0230       | 5.52         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.10 JB      | 0.0286       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 59   | 25 - 164 |
| 13C12-12378-PeCDD     | 72   | 25 - 181 |
| 13C12-123478-HxCDD    | 72   | 32 - 141 |
| 13C12-123678-HxCDD    | 72   | 28 - 130 |
| 13C12-123789-HxCDD    | 71   | 28 - 130 |
| 13C12-1234678-HpCDD   | 74   | 23 - 140 |
| 13C12-OCDD            | 72   | 17 - 157 |
| 13C12-2378-TCDF       | 64   | 24 - 169 |
| 13C12-12378-PeCDF     | 76   | 24 - 185 |
| 13C12-23478-PeCDF     | 75   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 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   | 74   | 26 - 138 |
| 13C12-OCDF            | 69   | 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

**Sample Description:** SL-015-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6162881  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:33

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1701 SDG#: DX017-01

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

**Sample Description:** SL-015-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5C-SB-4.0-5.0

LLI Sample # SW 6162881  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:33

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1701 SDG#: DX017-01

## 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      | 10356002     | 12/28/2010 16:08       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401A | 12/31/2010 05:52       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-015-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5C-SB-9.0-10.0

LLI Sample # SW 6162882  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:40

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1702 SDG#: DX017-02

| CAT No.                   | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                               |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                               |            |            |                             |                           |                 |
| 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-015-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5C-SB-9.0-10.0

LLI Sample # SW 6162882  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:40

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1702 SDG#: DX017-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0183 U     | 0.0183       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0791 JBQ   | 0.0249       | 5.44         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0637 JQ    | 0.0249       | 5.44         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.377 JB     | 0.0258       | 5.44         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.225 JBQ    | 0.0256       | 5.44         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 9.27 B       | 0.0375       | 5.44         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 91.3 B       | 0.0406       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0356 J     | 0.0236       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.135 JB     | 0.0125       | 5.44         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.128 JB     | 0.0121       | 5.44         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.170 JBQ    | 0.0188       | 5.44         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.146 JBQ    | 0.0166       | 5.44         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.143 JB     | 0.0214       | 5.44         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.213 JB     | 0.0180       | 5.44         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.45 JB      | 0.0149       | 5.44         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.210 JBQ    | 0.0209       | 5.44         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.45 JB      | 0.0268       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 68   | 25 - 164 |
| 13C12-12378-PeCDD     | 80   | 25 - 181 |
| 13C12-123478-HxCDD    | 79   | 32 - 141 |
| 13C12-123678-HxCDD    | 80   | 28 - 130 |
| 13C12-123789-HxCDD    | 79   | 28 - 130 |
| 13C12-1234678-HpCDD   | 82   | 23 - 140 |
| 13C12-OCDD            | 81   | 17 - 157 |
| 13C12-2378-TCDF       | 72   | 24 - 169 |
| 13C12-12378-PeCDF     | 86   | 24 - 185 |
| 13C12-23478-PeCDF     | 82   | 21 - 178 |
| 13C12-123478-HxCDF    | 80   | 26 - 152 |
| 13C12-123678-HxCDF    | 87   | 26 - 123 |
| 13C12-234678-HxCDF    | 80   | 28 - 136 |
| 13C12-123789-HxCDF    | 79   | 29 - 147 |
| 13C12-1234678-HpCDF   | 92   | 28 - 143 |
| 13C12-1234789-HpCDF   | 80   | 26 - 138 |
| 13C12-OCDF            | 77   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 74   | 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-015-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6162882  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:40

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1702 SDG#: DX017-02

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

**Sample Description:** SL-015-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5C-SB-9.0-10.0

LLI Sample # SW 6162882  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:40

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1702 SDG#: DX017-02

## 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      | 10356002     | 12/28/2010 17:05       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401A | 12/31/2010 05:52       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-020-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5C-SB-4.0-5.0

LLI Sample # SW 6162883  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 09:55

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1703 SDG#: DX017-03

| CAT No.                   | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                               |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                               |            |            |                             |                           |                 |
| 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-020-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5C-SB-4.0-5.0

LLI Sample # SW 6162883  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 09:55

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1703 SDG#: DX017-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0221 U     | 0.0221       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0484 JB    | 0.0248       | 5.56         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0562 J     | 0.0217       | 5.56         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.142 JB     | 0.0228       | 5.56         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.175 JB     | 0.0218       | 5.56         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.09 JB      | 0.0291       | 5.56         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 16.9 B       | 0.0337       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0283 J     | 0.0221       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0810 JBQ   | 0.0132       | 5.56         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.155 JB     | 0.0127       | 5.56         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.180 JBQ    | 0.0214       | 5.56         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.137 JBQ    | 0.0186       | 5.56         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.154 JB     | 0.0247       | 5.56         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.285 JB     | 0.0206       | 5.56         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.09 JB      | 0.0162       | 5.56         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.138 JB     | 0.0239       | 5.56         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.987 JB     | 0.0321       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 57   | 25 - 164 |
| 13C12-12378-PeCDD     | 73   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 73   | 28 - 130 |
| 13C12-1234678-HpCDD   | 77   | 23 - 140 |
| 13C12-OCDD            | 75   | 17 - 157 |
| 13C12-2378-TCDF       | 60   | 24 - 169 |
| 13C12-12378-PeCDF     | 77   | 24 - 185 |
| 13C12-23478-PeCDF     | 74   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 80   | 26 - 123 |
| 13C12-234678-HxCDF    | 74   | 28 - 136 |
| 13C12-123789-HxCDF    | 70   | 29 - 147 |
| 13C12-1234678-HpCDF   | 90   | 28 - 143 |
| 13C12-1234789-HpCDF   | 73   | 26 - 138 |
| 13C12-OCDF            | 68   | 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-020-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5C-SB-4.0-5.0

LLI Sample # SW 6162883  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 09:55

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1703 SDG#: DX017-03

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

**Sample Description:** SL-020-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5C-SB-4.0-5.0

LLI Sample # SW 6162883  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 09:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/10/2010 09:15

Suite 210

Reported: 01/28/2011 16:59

Chantilly VA 20151

X1703 SDG#: DX017-03

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## General Sample Comments

State of California Lab Certification No. 2501

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

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## 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      | 10356002     | 12/28/2010 18:01       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401A | 12/31/2010 05:52       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-020-SA5C-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5C-SB-7.5-8.5

LLI Sample # SW 6162884  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 10:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1704 SDG#: DX017-04

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 8.7        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-020-SA5C-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5C-SB-7.5-8.5

LLI Sample # SW 6162884  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 10:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1704 SDG#: DX017-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0311 JBQ   | 0.0203       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0363 JBQ   | 0.0243       | 5.48         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0151 U     | 0.0151       | 5.48         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0235 JB    | 0.0157       | 5.48         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0369 JB    | 0.0154       | 5.48         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.285 JBQ    | 0.0221       | 5.48         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.698 JB     | 0.0286       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0146 U     | 0.0146       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0230 JBQ   | 0.00953      | 5.48         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0802 JB    | 0.00953      | 5.48         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0813 JB    | 0.0160       | 5.48         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0488 JB    | 0.0136       | 5.48         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0176 U     | 0.0176       | 5.48         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.114 JB     | 0.0156       | 5.48         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.396 JB     | 0.0110       | 5.48         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0581 JBQ   | 0.0175       | 5.48         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.265 JB     | 0.0257       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 55   | 25 - 164 |
| 13C12-12378-PeCDD     | 70   | 25 - 181 |
| 13C12-123478-HxCDD    | 74   | 32 - 141 |
| 13C12-123678-HxCDD    | 73   | 28 - 130 |
| 13C12-123789-HxCDD    | 71   | 28 - 130 |
| 13C12-1234678-HpCDD   | 76   | 23 - 140 |
| 13C12-OCDD            | 74   | 17 - 157 |
| 13C12-2378-TCDF       | 58   | 24 - 169 |
| 13C12-12378-PeCDF     | 76   | 24 - 185 |
| 13C12-23478-PeCDF     | 72   | 21 - 178 |
| 13C12-123478-HxCDF    | 73   | 26 - 152 |
| 13C12-123678-HxCDF    | 81   | 26 - 123 |
| 13C12-234678-HxCDF    | 73   | 28 - 136 |
| 13C12-123789-HxCDF    | 72   | 29 - 147 |
| 13C12-1234678-HpCDF   | 94   | 28 - 143 |
| 13C12-1234789-HpCDF   | 71   | 26 - 138 |
| 13C12-OCDF            | 65   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 65   | 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-020-SA5C-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5C-SB-7.5-8.5

**LLI Sample #** SW 6162884  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 10:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1704 SDG#: DX017-04

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

**Sample Description:** SL-020-SA5C-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5C-SB-7.5-8.5

**LLI Sample #** SW 6162884  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/08/2010 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 12/10/2010 09:15

Suite 210

**Reported:** 01/28/2011 16:59

Chantilly VA 20151

X1704 SDG#: DX017-04

## 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      | 10356002     | 12/28/2010 18:58       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401A | 12/31/2010 05:52       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-016-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5C-SB-4.0-5.0

LLI Sample # SW 6162885  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 16:10

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1705 SDG#: DX017-05

| CAT<br>No.           | Analysis Name                 | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|-------------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                               |            |               |                                   |                                 |                    |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 8.8           | 0.50                              | 0.50                            | 1                  |

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

**Sample Description:** SL-016-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5C-SB-4.0-5.0

LLI Sample # SW 6162885  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 16:10

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1705 SDG#: DX017-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0322 JB    | 0.0194       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.126 JBQ    | 0.0237       | 5.48         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.100 JQ     | 0.0240       | 5.48         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.340 JB     | 0.0246       | 5.48         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.254 JB     | 0.0251       | 5.48         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 7.23 B       | 0.0349       | 5.48         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 100 B        | 0.0406       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0445 JQ    | 0.0219       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.176 JBQ    | 0.0126       | 5.48         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.175 JB     | 0.0121       | 5.48         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.159 JB     | 0.0190       | 5.48         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.157 JB     | 0.0178       | 5.48         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.173 JBQ    | 0.0219       | 5.48         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.219 JB     | 0.0183       | 5.48         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.16 JB      | 0.0143       | 5.48         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.142 JBQ    | 0.0180       | 5.48         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.07 JB      | 0.0239       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 68   | 25 - 164 |
| 13C12-12378-PeCDD     | 80   | 25 - 181 |
| 13C12-123478-HxCDD    | 78   | 32 - 141 |
| 13C12-123678-HxCDD    | 79   | 28 - 130 |
| 13C12-123789-HxCDD    | 78   | 28 - 130 |
| 13C12-1234678-HpCDD   | 80   | 23 - 140 |
| 13C12-OCDD            | 78   | 17 - 157 |
| 13C12-2378-TCDF       | 77   | 24 - 169 |
| 13C12-12378-PeCDF     | 86   | 24 - 185 |
| 13C12-23478-PeCDF     | 87   | 21 - 178 |
| 13C12-123478-HxCDF    | 82   | 26 - 152 |
| 13C12-123678-HxCDF    | 85   | 26 - 123 |
| 13C12-234678-HxCDF    | 81   | 28 - 136 |
| 13C12-123789-HxCDF    | 80   | 29 - 147 |
| 13C12-1234678-HpCDF   | 88   | 28 - 143 |
| 13C12-1234789-HpCDF   | 84   | 26 - 138 |
| 13C12-OCDF            | 79   | 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-016-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5C-SB-4.0-5.0

LLI Sample # SW 6162885  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 16:10

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1705 SDG#: DX017-05

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

**Sample Description:** SL-016-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5C-SB-4.0-5.0

LLI Sample # SW 6162885  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 16:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/10/2010 09:15

Suite 210

Reported: 01/28/2011 16:59

Chantilly VA 20151

X1705 SDG#: DX017-05

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## General Sample Comments

State of California Lab Certification No. 2501

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

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## 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      | 10356002     | 12/28/2010 19:54       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401A | 12/31/2010 05:52       | William C Schwebel  | 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-016-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5C-SB-9.0-10.0

LLI Sample # SW 6162886  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 16:23

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1706 SDG#: DX017-06

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.1        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-016-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5C-SB-9.0-10.0

LLI Sample # SW 6162886  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 16:23

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1706 SDG#: DX017-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0242 JBQ   | 0.0162       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0799 JBQ   | 0.0249       | 5.50         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0468 JQ    | 0.0216       | 5.50         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.217 JBQ    | 0.0223       | 5.50         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.200 JBQ    | 0.0223       | 5.50         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 4.64 JB      | 0.0334       | 5.50         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 75.9 B       | 0.0391       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0266 JQ    | 0.0211       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.134 JB     | 0.0118       | 5.50         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.132 JB     | 0.0114       | 5.50         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.137 JB     | 0.0178       | 5.50         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.124 JB     | 0.0162       | 5.50         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.151 JBQ    | 0.0200       | 5.50         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.192 JBQ    | 0.0171       | 5.50         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.890 JB     | 0.0111       | 5.50         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.111 JB     | 0.0165       | 5.50         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.27 JB      | 0.0283       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 69   | 25 - 164 |
| 13C12-12378-PeCDD     | 78   | 25 - 181 |
| 13C12-123478-HxCDD    | 77   | 32 - 141 |
| 13C12-123678-HxCDD    | 78   | 28 - 130 |
| 13C12-123789-HxCDD    | 77   | 28 - 130 |
| 13C12-1234678-HpCDD   | 80   | 23 - 140 |
| 13C12-OCDD            | 79   | 17 - 157 |
| 13C12-2378-TCDF       | 74   | 24 - 169 |
| 13C12-12378-PeCDF     | 84   | 24 - 185 |
| 13C12-23478-PeCDF     | 82   | 21 - 178 |
| 13C12-123478-HxCDF    | 79   | 26 - 152 |
| 13C12-123678-HxCDF    | 84   | 26 - 123 |
| 13C12-234678-HxCDF    | 79   | 28 - 136 |
| 13C12-123789-HxCDF    | 79   | 29 - 147 |
| 13C12-1234678-HpCDF   | 95   | 28 - 143 |
| 13C12-1234789-HpCDF   | 77   | 26 - 138 |
| 13C12-OCDF            | 70   | 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:** SL-016-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5C-SB-9.0-10.0

LLI Sample # SW 6162886  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 16:23

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1706 SDG#: DX017-06

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

**Sample Description:** SL-016-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5C-SB-9.0-10.0

LLI Sample # SW 6162886  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 16:23

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1706 SDG#: DX017-06

## 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      | 10356002     | 12/28/2010 20:51       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401A | 12/31/2010 05:52       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-021-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5C-SB-4.0-5.0

LLI Sample # SW 6162887  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 11:55

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1707 SDG#: DX017-07

| CAT<br>No.           | Analysis Name                 | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|-------------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                               |            |               |                                   |                                 |                    |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 6.4           | 0.50                              | 0.50                            | 1                  |

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

**Sample Description:** SL-021-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5C-SB-4.0-5.0

LLI Sample # SW 6162887  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 11:55

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1707 SDG#: DX017-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0275 U     | 0.0275       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0416 U     | 0.0416       | 5.34         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.136 J      | 0.0517       | 5.34         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.491 JB     | 0.0537       | 5.34         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.352 JBQ    | 0.0513       | 5.34         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 10.7 B       | 0.0644       | 5.34         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 111 B        | 0.0698       | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0685 JQ    | 0.0379       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.185 JB     | 0.0221       | 5.34         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.381 JBQ    | 0.0216       | 5.34         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.247 JB     | 0.0365       | 5.34         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.246 JB     | 0.0324       | 5.34         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.293 JBQ    | 0.0416       | 5.34         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.302 JB     | 0.0357       | 5.34         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.90 JB      | 0.0299       | 5.34         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.331 JB     | 0.0416       | 5.34         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.49 JB      | 0.0471       | 10.7         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 68   | 25 - 164 |
| 13C12-12378-PeCDD     | 74   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 74   | 28 - 130 |
| 13C12-123789-HxCDD    | 75   | 28 - 130 |
| 13C12-1234678-HpCDD   | 76   | 23 - 140 |
| 13C12-OCDD            | 74   | 17 - 157 |
| 13C12-2378-TCDF       | 72   | 24 - 169 |
| 13C12-12378-PeCDF     | 81   | 24 - 185 |
| 13C12-23478-PeCDF     | 80   | 21 - 178 |
| 13C12-123478-HxCDF    | 78   | 26 - 152 |
| 13C12-123678-HxCDF    | 83   | 26 - 123 |
| 13C12-234678-HxCDF    | 78   | 28 - 136 |
| 13C12-123789-HxCDF    | 76   | 29 - 147 |
| 13C12-1234678-HpCDF   | 88   | 28 - 143 |
| 13C12-1234789-HpCDF   | 76   | 26 - 138 |
| 13C12-OCDF            | 70   | 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-021-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5C-SB-4.0-5.0

LLI Sample # SW 6162887  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 11:55

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1707 SDG#: DX017-07

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

**Sample Description:** SL-021-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5C-SB-4.0-5.0

LLI Sample # SW 6162887  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 11:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/10/2010 09:15

Suite 210

Reported: 01/28/2011 16:59

Chantilly VA 20151

X1707 SDG#: DX017-07

---

## 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      | 10356002     | 12/29/2010 00:50       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401A | 12/31/2010 05:52       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-021-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5C-SB-9.0-10.0

LLI Sample # SW 6162888  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 12:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1708 SDG#: DX017-08

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-021-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5C-SB-9.0-10.0

LLI Sample # SW 6162888  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 12:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1708 SDG#: DX017-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0205 U     | 0.0205       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.157 JBQ    | 0.0366       | 5.46         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.103 JQ     | 0.0374       | 5.46         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.543 JBQ    | 0.0396       | 5.46         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.304 JBQ    | 0.0384       | 5.46         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 15.2 B       | 0.0514       | 5.46         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 123 B        | 0.0480       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0267 U     | 0.0267       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.167 JBQ    | 0.0179       | 5.46         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.136 JB     | 0.0164       | 5.46         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.262 JBQ    | 0.0301       | 5.46         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.187 JB     | 0.0260       | 5.46         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.251 JB     | 0.0355       | 5.46         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.205 JBQ    | 0.0286       | 5.46         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.73 JB      | 0.0201       | 5.46         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.235 JB     | 0.0341       | 5.46         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.98 JB      | 0.0425       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 68   | 25 - 164 |
| 13C12-12378-PeCDD     | 76   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 75   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 76   | 23 - 140 |
| 13C12-OCDD            | 72   | 17 - 157 |
| 13C12-2378-TCDF       | 75   | 24 - 169 |
| 13C12-12378-PeCDF     | 81   | 24 - 185 |
| 13C12-23478-PeCDF     | 81   | 21 - 178 |
| 13C12-123478-HxCDF    | 79   | 26 - 152 |
| 13C12-123678-HxCDF    | 84   | 26 - 123 |
| 13C12-234678-HxCDF    | 78   | 28 - 136 |
| 13C12-123789-HxCDF    | 72   | 29 - 147 |
| 13C12-1234678-HpCDF   | 95   | 28 - 143 |
| 13C12-1234789-HpCDF   | 70   | 26 - 138 |
| 13C12-OCDF            | 62   | 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-021-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5C-SB-9.0-10.0

LLI Sample # SW 6162888  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 12:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1708 SDG#: DX017-08

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

**Sample Description:** SL-021-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5C-SB-9.0-10.0

LLI Sample # SW 6162888  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 12:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1708 SDG#: DX017-08

## 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      | 10356002     | 12/29/2010 01:46       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401A | 12/31/2010 05:52       | William C Schwebel  | 1               |



# 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-017-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

LLI Sample # SW 6162889  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09BKG

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-017-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

LLI Sample # SW 6162889  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0244 JBQ   | 0.0216       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.221 JBQ    | 0.0326       | 5.46         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.127 J      | 0.0397       | 5.46         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.566 JBQ    | 0.0408       | 5.46         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.580 JB     | 0.0396       | 5.46         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 13.7 B       | 0.0569       | 5.46         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 176 B        | 0.0553       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0325 JQ    | 0.0267       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.149 JB     | 0.0163       | 5.46         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.170 JB     | 0.0146       | 5.46         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.151 JBQ    | 0.0251       | 5.46         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.161 JB     | 0.0225       | 5.46         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.180 JB     | 0.0278       | 5.46         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.195 JB     | 0.0243       | 5.46         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.82 JB      | 0.0214       | 5.46         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.204 JBQ    | 0.0316       | 5.46         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.90 JB      | 0.0343       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 70   | 25 - 164 |
| 13C12-12378-PeCDD     | 79   | 25 - 181 |
| 13C12-123478-HxCDD    | 76   | 32 - 141 |
| 13C12-123678-HxCDD    | 75   | 28 - 130 |
| 13C12-123789-HxCDD    | 76   | 28 - 130 |
| 13C12-1234678-HpCDD   | 77   | 23 - 140 |
| 13C12-OCDD            | 75   | 17 - 157 |
| 13C12-2378-TCDF       | 76   | 24 - 169 |
| 13C12-12378-PeCDF     | 83   | 24 - 185 |
| 13C12-23478-PeCDF     | 85   | 21 - 178 |
| 13C12-123478-HxCDF    | 78   | 26 - 152 |
| 13C12-123678-HxCDF    | 82   | 26 - 123 |
| 13C12-234678-HxCDF    | 79   | 28 - 136 |
| 13C12-123789-HxCDF    | 77   | 29 - 147 |
| 13C12-1234678-HpCDF   | 93   | 28 - 143 |
| 13C12-1234789-HpCDF   | 76   | 26 - 138 |
| 13C12-OCDF            | 67   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 74   | 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-017-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162889  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09BKG

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

**Sample Description:** SL-017-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

LLI Sample # SW 6162889  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09BKG

## 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      | 10356002     | 12/29/2010 02:43       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401B | 12/31/2010 05:52       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-017-SA5B-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

LLI Sample # SW 6162890  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09MS

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-017-SA5B-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

LLI Sample # SW 6162890  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|---|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |   | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.8         | B | 0.0352       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 111          | B | 0.0514       | 5.46         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 116          |   | 0.0578       | 5.46         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 115          | B | 0.0580       | 5.46         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 116          | B | 0.0562       | 5.46         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 145          | B | 0.0940       | 5.46         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 871          | B | 0.111        | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 23.0         |   | 0.0408       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 115          | B | 0.0252       | 5.46         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 113          | B | 0.0232       | 5.46         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 110          | B | 0.0556       | 5.46         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 109          | B | 0.0495       | 5.46         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 110          | B | 0.0617       | 5.46         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 112          | B | 0.0549       | 5.46         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 112          | B | 0.0478       | 5.46         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 110          | B | 0.0611       | 5.46         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 232          | B | 0.0612       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 57   | 25 - 164 |
| 13C12-12378-PeCDD     | 69   | 25 - 181 |
| 13C12-123478-HxCDD    | 64   | 32 - 141 |
| 13C12-123678-HxCDD    | 64   | 28 - 130 |
| 13C12-123789-HxCDD    | 64   | 28 - 130 |
| 13C12-1234678-HpCDD   | 66   | 23 - 140 |
| 13C12-OCDD            | 64   | 17 - 157 |
| 13C12-2378-TCDF       | 62   | 24 - 169 |
| 13C12-12378-PeCDF     | 74   | 24 - 185 |
| 13C12-23478-PeCDF     | 73   | 21 - 178 |
| 13C12-123478-HxCDF    | 67   | 26 - 152 |
| 13C12-123678-HxCDF    | 71   | 26 - 123 |
| 13C12-234678-HxCDF    | 66   | 28 - 136 |
| 13C12-123789-HxCDF    | 67   | 29 - 147 |
| 13C12-1234678-HpCDF   | 73   | 28 - 143 |
| 13C12-1234789-HpCDF   | 67   | 26 - 138 |
| 13C12-OCDF            | 63   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 63   | 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-017-SA5B-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162890  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09MS

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

**Sample Description:** SL-017-SA5B-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

LLI Sample # SW 6162890  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/10/2010 09:15

Suite 210

Reported: 01/28/2011 16:59

Chantilly VA 20151

X1709 SDG#: DX017-09MS

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## 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      | 10356002     | 12/29/2010 03:40       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401B | 12/31/2010 05:52       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-017-SA5B-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

LLI Sample # SW 6162891  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09MSD

| 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-017-SA5B-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

LLI Sample # SW 6162891  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|---|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |   | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.9         | B | 0.0313       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 112          | B | 0.0467       | 5.46         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 113          |   | 0.0400       | 5.46         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 112          | B | 0.0410       | 5.46         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 115          | B | 0.0416       | 5.46         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 126          | B | 0.0749       | 5.46         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 411          | B | 0.0685       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 23.0         |   | 0.0349       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 113          | B | 0.0225       | 5.46         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 112          | B | 0.0213       | 5.46         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 109          | B | 0.0431       | 5.46         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 110          | B | 0.0402       | 5.46         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 110          | B | 0.0498       | 5.46         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 108          | B | 0.0408       | 5.46         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 111          | B | 0.0507       | 5.46         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 109          | B | 0.0643       | 5.46         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 223          | B | 0.0458       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 60   | 25 - 164 |
| 13C12-12378-PeCDD     | 75   | 25 - 181 |
| 13C12-123478-HxCDD    | 76   | 32 - 141 |
| 13C12-123678-HxCDD    | 77   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 79   | 23 - 140 |
| 13C12-OCDD            | 76   | 17 - 157 |
| 13C12-2378-TCDF       | 67   | 24 - 169 |
| 13C12-12378-PeCDF     | 77   | 24 - 185 |
| 13C12-23478-PeCDF     | 79   | 21 - 178 |
| 13C12-123478-HxCDF    | 80   | 26 - 152 |
| 13C12-123678-HxCDF    | 81   | 26 - 123 |
| 13C12-234678-HxCDF    | 79   | 28 - 136 |
| 13C12-123789-HxCDF    | 76   | 29 - 147 |
| 13C12-1234678-HpCDF   | 85   | 28 - 143 |
| 13C12-1234789-HpCDF   | 81   | 26 - 138 |
| 13C12-OCDF            | 77   | 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-017-SA5B-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162891  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09MSD

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

**Sample Description:** SL-017-SA5B-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5B-SS-0.0-0.5

LLI Sample # SW 6162891  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 15:30

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1709 SDG#: DX017-09MSD

## 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      | 10356002     | 12/29/2010 04:36       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401B | 12/31/2010 05:52       | William C Schwebel  | 1               |

**Sample Description: EB-01-SA5B-120910 Water**  
**SSFL Area IV Collocated Soil Sampling**  
**EB-01-SA5B-120910**

**LLI Sample # WW 6162892**  
**LLI Group # 1225036**  
**Account # 13013**

**Project Name: SSFL Area IV Collocated Soil Sampling**

Collected: 12/09/2010 12:10

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1710 SDG#: DX017-10EB

| CAT No.               | Analysis Name | CAS Number       | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|-----------------------|---------------|------------------|--------------------|------------------|-----------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>pg/l</b>        | <b>pg/l</b>      | <b>pg/l</b>     |                 |
| 10915                 | 2378-TCDD     | 1746-01-6        | 0.478 JQ           | 0.237            | 2.07            | 1               |
| 10915                 | 12378-PeCDD   | 40321-76-4       | 0.366 JBQ          | 0.218            | 10.4            | 1               |
| 10915                 | 123478-HxCDD  | 39227-28-6       | 0.249 JBQ          | 0.169            | 10.4            | 1               |
| 10915                 | 123678-HxCDD  | 57653-85-7       | 0.325 JBQ          | 0.166            | 10.4            | 1               |
| 10915                 | 123789-HxCDD  | 19408-74-3       | 0.271 JB           | 0.171            | 10.4            | 1               |
| 10915                 | 1234678-HpCDD | 35822-46-9       | 2.49 JB            | 0.271            | 10.4            | 1               |
| 10915                 | OCDD          | 3268-87-9        | 2.77 JB            | 0.295            | 20.7            | 1               |
| 10915                 | 2378-TCDF     | 51207-31-9       | 0.160 JBQ          | 0.149            | 2.07            | 1               |
| 10915                 | 12378-PeCDF   | 57117-41-6       | 0.271 JBQ          | 0.132            | 10.4            | 1               |
| 10915                 | 23478-PeCDF   | 57117-31-4       | 0.665 JBQ          | 0.118            | 10.4            | 1               |
| 10915                 | 123478-HxCDF  | 70648-26-9       | 0.739 JBQ          | 0.170            | 10.4            | 1               |
| 10915                 | 123678-HxCDF  | 57117-44-9       | 0.722 JB           | 0.167            | 10.4            | 1               |
| 10915                 | 123789-HxCDF  | 72918-21-9       | 0.502 JB           | 0.179            | 10.4            | 1               |
| 10915                 | 234678-HxCDF  | 60851-34-5       | 1.12 JB            | 0.162            | 10.4            | 1               |
| 10915                 | 1234678-HpCDF | 67562-39-4       | 4.77 JB            | 0.153            | 10.4            | 1               |
| 10915                 | 1234789-HpCDF | 55673-89-7       | 0.658 JB           | 0.192            | 10.4            | 1               |
| 10915                 | OCDF          | 39001-02-0       | 2.78 JB            | 0.248            | 20.7            | 1               |

The method blank and OPR associated with this sample had recoveries of some labeled compounds that were outside method limits. The sample was re-extracted outside the client specified holding time on an extraction batch with compliant recoveries in the method blank and OPR. Comparable sample results were observed between the two extractions.

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 32   | 25 - 164 |
| 13C12-12378-PeCDD     | 47   | 25 - 181 |
| 13C12-123478-HxCDD    | 46   | 32 - 141 |
| 13C12-123678-HxCDD    | 45   | 28 - 130 |
| 13C12-123789-HxCDD    | 45   | 28 - 130 |
| 13C12-1234678-HpCDD   | 43   | 23 - 140 |
| 13C12-OCDD            | 35   | 17 - 157 |
| 13C12-2378-TCDF       | 51   | 24 - 169 |
| 13C12-12378-PeCDF     | 53   | 24 - 185 |
| 13C12-23478-PeCDF     | 55   | 21 - 178 |
| 13C12-123478-HxCDF    | 48   | 26 - 152 |
| 13C12-123678-HxCDF    | 47   | 26 - 123 |
| 13C12-234678-HxCDF    | 49   | 28 - 136 |
| 13C12-123789-HxCDF    | 50   | 29 - 147 |
| 13C12-1234678-HpCDF   | 46   | 28 - 143 |
| 13C12-1234789-HpCDF   | 42   | 26 - 138 |
| 13C12-OCDF            | 34   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 52   | 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-01-SA5B-120910 Water  
SSFL Area IV Collocated Soil Sampling  
EB-01-SA5B-120910

LLI Sample # WW 6162892  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 12:10

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1710 SDG#: DX017-10EB

| 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      | 10349001 | 12/21/2010 18:27       | Nelson H Risser  | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 1      | 10349001 | 12/15/2010 06:40       | Ginelle L Haines | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 2      | 11018003 | 01/19/2011 06:00       | Ginelle L Haines | 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-029-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA5B-SS-0.0-0.5

LLI Sample # SW 6162893  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:27

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1711 SDG#: DX017-11

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 8.6        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-029-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA5B-SS-0.0-0.5

LLI Sample # SW 6162893  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:27

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1711 SDG#: DX017-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0508 JBQ   | 0.0253       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.248 JBQ    | 0.0408       | 5.47         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.327 JQ     | 0.0345       | 5.47         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.832 JB     | 0.0360       | 5.47         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.961 JBQ    | 0.0335       | 5.47         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 21.4 B       | 0.0636       | 5.47         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 242 B        | 0.0616       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0335 J     | 0.0280       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.136 JBQ    | 0.0188       | 5.47         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.163 JBQ    | 0.0183       | 5.47         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.221 JB     | 0.0312       | 5.47         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.310 JB     | 0.0263       | 5.47         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.223 JB     | 0.0372       | 5.47         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.336 JBQ    | 0.0309       | 5.47         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.15 JB      | 0.0241       | 5.47         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.372 JB     | 0.0443       | 5.47         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 7.60 JB      | 0.0508       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 66   | 25 - 164 |
| 13C12-12378-PeCDD     | 74   | 25 - 181 |
| 13C12-123478-HxCDD    | 74   | 32 - 141 |
| 13C12-123678-HxCDD    | 72   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 75   | 23 - 140 |
| 13C12-OCDD            | 72   | 17 - 157 |
| 13C12-2378-TCDF       | 71   | 24 - 169 |
| 13C12-12378-PeCDF     | 82   | 24 - 185 |
| 13C12-23478-PeCDF     | 78   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 82   | 26 - 123 |
| 13C12-234678-HxCDF    | 75   | 28 - 136 |
| 13C12-123789-HxCDF    | 69   | 29 - 147 |
| 13C12-1234678-HpCDF   | 104  | 28 - 143 |
| 13C12-1234789-HpCDF   | 66   | 26 - 138 |
| 13C12-OCDF            | 53   | 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-029-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA5B-SS-0.0-0.5

LLI Sample # SW 6162893  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:27

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1711 SDG#: DX017-11

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

**Sample Description:** SL-029-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA5B-SS-0.0-0.5

LLI Sample # SW 6162893  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:27

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1711 SDG#: DX017-11

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### 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      | 10356002     | 12/29/2010 05:33       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 2      | 10347162401B | 12/14/2010 05:05       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-034-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5B-SS-0.0-0.5

LLI Sample # SW 6162894  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 13:25

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1712 SDG#: DX017-12

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-034-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5B-SS-0.0-0.5

LLI Sample # SW 6162894  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 13:25

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1712 SDG#: DX017-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0432 JBQ   | 0.0326       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.323 JB     | 0.0508       | 5.46         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.253 JQ     | 0.0405       | 5.46         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.874 JB     | 0.0417       | 5.46         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.684 JBQ    | 0.0436       | 5.46         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 20.8 B       | 0.0709       | 5.46         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 244 B        | 0.0752       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0978 J     | 0.0366       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.119 JBQ    | 0.0195       | 5.46         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.123 JBQ    | 0.0190       | 5.46         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.218 JBQ    | 0.0323       | 5.46         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.238 JB     | 0.0290       | 5.46         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.189 JB     | 0.0403       | 5.46         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.253 JB     | 0.0313       | 5.46         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.80 JB      | 0.0219       | 5.46         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.296 JBQ    | 0.0326       | 5.46         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 6.41 JB      | 0.0435       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 59   | 25 - 164 |
| 13C12-12378-PeCDD     | 69   | 25 - 181 |
| 13C12-123478-HxCDD    | 67   | 32 - 141 |
| 13C12-123678-HxCDD    | 67   | 28 - 130 |
| 13C12-123789-HxCDD    | 66   | 28 - 130 |
| 13C12-1234678-HpCDD   | 70   | 23 - 140 |
| 13C12-OCDD            | 67   | 17 - 157 |
| 13C12-2378-TCDF       | 66   | 24 - 169 |
| 13C12-12378-PeCDF     | 76   | 24 - 185 |
| 13C12-23478-PeCDF     | 73   | 21 - 178 |
| 13C12-123478-HxCDF    | 70   | 26 - 152 |
| 13C12-123678-HxCDF    | 75   | 26 - 123 |
| 13C12-234678-HxCDF    | 69   | 28 - 136 |
| 13C12-123789-HxCDF    | 64   | 29 - 147 |
| 13C12-1234678-HpCDF   | 84   | 28 - 143 |
| 13C12-1234789-HpCDF   | 67   | 26 - 138 |
| 13C12-OCDF            | 60   | 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-034-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162894  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 13:25

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1712 SDG#: DX017-12

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

**Sample Description:** SL-034-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5B-SS-0.0-0.5

LLI Sample # SW 6162894  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 13:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/10/2010 09:15

Suite 210

Reported: 01/28/2011 16:59

Chantilly VA 20151

X1712 SDG#: DX017-12

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## 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      | 10356002     | 12/29/2010 06:29       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 2      | 10347162401B | 12/14/2010 05:05       | William C Schwebel  | 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-035-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA5B-SS-0.0-0.5

LLI Sample # SW 6162895  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1713 SDG#: DX017-13

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.8        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-035-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA5B-SS-0.0-0.5

LLI Sample # SW 6162895  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1713 SDG#: DX017-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0462 U     | 0.0462       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.158 JBQ    | 0.0715       | 5.54         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.144 JQ     | 0.0523       | 5.54         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.351 JB     | 0.0552       | 5.54         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.226 JBQ    | 0.0541       | 5.54         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 7.97 B       | 0.0717       | 5.54         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 89.7 B       | 0.0741       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0532 JQ    | 0.0364       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.110 JBQ    | 0.0243       | 5.54         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.210 JBQ    | 0.0242       | 5.54         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.134 JBQ    | 0.0360       | 5.54         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0990 JB    | 0.0306       | 5.54         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.124 JB     | 0.0424       | 5.54         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.145 JBQ    | 0.0335       | 5.54         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.29 JB      | 0.0326       | 5.54         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.201 JBQ    | 0.0545       | 5.54         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.91 JB      | 0.0678       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 39   | 25 - 164 |
| 13C12-12378-PeCDD     | 43   | 25 - 181 |
| 13C12-123478-HxCDD    | 43   | 32 - 141 |
| 13C12-123678-HxCDD    | 44   | 28 - 130 |
| 13C12-123789-HxCDD    | 44   | 28 - 130 |
| 13C12-1234678-HpCDD   | 45   | 23 - 140 |
| 13C12-OCDD            | 43   | 17 - 157 |
| 13C12-2378-TCDF       | 44   | 24 - 169 |
| 13C12-12378-PeCDF     | 51   | 24 - 185 |
| 13C12-23478-PeCDF     | 47   | 21 - 178 |
| 13C12-123478-HxCDF    | 44   | 26 - 152 |
| 13C12-123678-HxCDF    | 50   | 26 - 123 |
| 13C12-234678-HxCDF    | 46   | 28 - 136 |
| 13C12-123789-HxCDF    | 42   | 29 - 147 |
| 13C12-1234678-HpCDF   | 56   | 28 - 143 |
| 13C12-1234789-HpCDF   | 42   | 26 - 138 |
| 13C12-OCDF            | 36   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 43   | 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-035-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA5B-SS-0.0-0.5

LLI Sample # SW 6162895  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1713 SDG#: DX017-13

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

**Sample Description:** SL-035-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA5B-SS-0.0-0.5

LLI Sample # SW 6162895  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 14:00

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1713 SDG#: DX017-13

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### General Sample Comments

State of California Lab Certification No. 2501

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

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### 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      | 10356002     | 12/29/2010 07:26       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 2      | 10347162401B | 12/14/2010 05:05       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-036-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA5B-SS-0.0-0.5

LLI Sample # SW 6162896  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 13:45

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1714 SDG#: DX017-14

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.6        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-036-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA5B-SS-0.0-0.5

LLI Sample # SW 6162896  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 13:45

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1714 SDG#: DX017-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0545 JBQ   | 0.0210       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.291 JBQ    | 0.0412       | 5.53         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.287 J      | 0.0361       | 5.53         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.793 JB     | 0.0368       | 5.53         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.651 JB     | 0.0343       | 5.53         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 19.0 B       | 0.0631       | 5.53         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 244 B        | 0.0614       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0659 JQ    | 0.0282       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.154 JB     | 0.0152       | 5.53         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.185 JBQ    | 0.0147       | 5.53         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.194 JBQ    | 0.0260       | 5.53         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.197 JBQ    | 0.0228       | 5.53         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.137 JBQ    | 0.0275       | 5.53         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.228 JB     | 0.0244       | 5.53         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.21 JB      | 0.0207       | 5.53         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.221 JBQ    | 0.0272       | 5.53         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 5.23 JB      | 0.0301       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 71   | 25 - 164 |
| 13C12-12378-PeCDD     | 74   | 25 - 181 |
| 13C12-123478-HxCDD    | 72   | 32 - 141 |
| 13C12-123678-HxCDD    | 71   | 28 - 130 |
| 13C12-123789-HxCDD    | 75   | 28 - 130 |
| 13C12-1234678-HpCDD   | 74   | 23 - 140 |
| 13C12-OCDD            | 71   | 17 - 157 |
| 13C12-2378-TCDF       | 75   | 24 - 169 |
| 13C12-12378-PeCDF     | 81   | 24 - 185 |
| 13C12-23478-PeCDF     | 79   | 21 - 178 |
| 13C12-123478-HxCDF    | 75   | 26 - 152 |
| 13C12-123678-HxCDF    | 78   | 26 - 123 |
| 13C12-234678-HxCDF    | 77   | 28 - 136 |
| 13C12-123789-HxCDF    | 77   | 29 - 147 |
| 13C12-1234678-HpCDF   | 81   | 28 - 143 |
| 13C12-1234789-HpCDF   | 75   | 26 - 138 |
| 13C12-OCDF            | 66   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 72   | 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-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA5B-SS-0.0-0.5

LLI Sample # SW 6162896  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/08/2010 13:45

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1714 SDG#: DX017-14

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

**Sample Description:** SL-036-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162896  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/08/2010 13:45

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

**Submitted:** 12/10/2010 09:15

**Reported:** 01/28/2011 16:59

X1714 SDG#: DX017-14

## 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      | 10356002     | 12/29/2010 08:22       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 2      | 10347162401B | 12/14/2010 05:05       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-022-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5C-SB-4.0-5.0

LLI Sample # SW 6162897  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 09:56

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1715 SDG#: DX017-15

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 8.9        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-022-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5C-SB-4.0-5.0

LLI Sample # SW 6162897  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 09:56

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1715 SDG#: DX017-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0143 JBQ   | 0.00867      | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0525 JBQ   | 0.0128       | 5.49         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0371 JQ    | 0.0135       | 5.49         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.103 JB     | 0.0137       | 5.49         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.131 JBQ    | 0.0132       | 5.49         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.340 JB     | 0.0157       | 5.49         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.95 JB      | 0.0166       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0303 JQ    | 0.0108       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0712 JB    | 0.00757      | 5.49         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.117 JBQ    | 0.00582      | 5.49         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0984 JB    | 0.0104       | 5.49         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0784 JB    | 0.0171       | 5.49         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.114 JB     | 0.0120       | 5.49         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0971 JBQ   | 0.00966      | 5.49         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.318 JB     | 0.00911      | 5.49         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0732 JBQ   | 0.0130       | 5.49         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.281 JB     | 0.0131       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 58   | 25 - 164 |
| 13C12-12378-PeCDD     | 66   | 25 - 181 |
| 13C12-123478-HxCDD    | 62   | 32 - 141 |
| 13C12-123678-HxCDD    | 63   | 28 - 130 |
| 13C12-123789-HxCDD    | 63   | 28 - 130 |
| 13C12-1234678-HpCDD   | 62   | 23 - 140 |
| 13C12-OCDD            | 58   | 17 - 157 |
| 13C12-2378-TCDF       | 61   | 24 - 169 |
| 13C12-12378-PeCDF     | 53   | 24 - 185 |
| 13C12-23478-PeCDF     | 68   | 21 - 178 |
| 13C12-123478-HxCDF    | 63   | 26 - 152 |
| 13C12-123678-HxCDF    | 41   | 26 - 123 |
| 13C12-234678-HxCDF    | 65   | 28 - 136 |
| 13C12-123789-HxCDF    | 63   | 29 - 147 |
| 13C12-1234678-HpCDF   | 71   | 28 - 143 |
| 13C12-1234789-HpCDF   | 61   | 26 - 138 |
| 13C12-OCDF            | 54   | 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



# Analysis Report

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

Page 3 of 4

**Sample Description:** SL-022-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5C-SB-4.0-5.0

LLI Sample # SW 6162897  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 09:56

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1715 SDG#: DX017-15

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

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

**Sample Description:** SL-022-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5C-SB-4.0-5.0

LLI Sample # SW 6162897  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 09:56

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1715 SDG#: DX017-15

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### General Sample Comments

State of California Lab Certification No. 2501

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

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### 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      | 10356002     | 12/31/2010 01:29       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401B | 12/31/2010 05:52       | William C Schwebel  | 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-022-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5C-SB-9.0-10.0

LLI Sample # SW 6162898  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:02

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1716 SDG#: DX017-16

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-022-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5C-SB-9.0-10.0

LLI Sample # SW 6162898  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:02

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1716 SDG#: DX017-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0162 JBQ   | 0.00792      | 1.15         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0187 JBQ   | 0.00930      | 5.74         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0179 JQ    | 0.00850      | 5.74         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0356 JB    | 0.00896      | 5.74         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0297 JBQ   | 0.00896      | 5.74         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.192 JB     | 0.0116       | 5.74         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.687 JB     | 0.0140       | 11.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0221 JQ    | 0.00608      | 1.15         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0359 JBQ   | 0.00459      | 5.74         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0762 JB    | 0.00390      | 5.74         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0618 JBQ   | 0.00677      | 5.74         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0529 JBQ   | 0.00643      | 5.74         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0352 JBQ   | 0.00735      | 5.74         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0815 JB    | 0.00631      | 5.74         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.313 JB     | 0.00574      | 5.74         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0473 JB    | 0.00792      | 5.74         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.252 JB     | 0.0104       | 11.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 62   | 25 - 164 |
| 13C12-12378-PeCDD     | 76   | 25 - 181 |
| 13C12-123478-HxCDD    | 73   | 32 - 141 |
| 13C12-123678-HxCDD    | 72   | 28 - 130 |
| 13C12-123789-HxCDD    | 71   | 28 - 130 |
| 13C12-1234678-HpCDD   | 73   | 23 - 140 |
| 13C12-OCDD            | 67   | 17 - 157 |
| 13C12-2378-TCDF       | 67   | 24 - 169 |
| 13C12-12378-PeCDF     | 73   | 24 - 185 |
| 13C12-23478-PeCDF     | 80   | 21 - 178 |
| 13C12-123478-HxCDF    | 73   | 26 - 152 |
| 13C12-123678-HxCDF    | 72   | 26 - 123 |
| 13C12-234678-HxCDF    | 74   | 28 - 136 |
| 13C12-123789-HxCDF    | 74   | 29 - 147 |
| 13C12-1234678-HpCDF   | 81   | 28 - 143 |
| 13C12-1234789-HpCDF   | 72   | 26 - 138 |
| 13C12-OCDF            | 65   | 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-022-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5C-SB-9.0-10.0

LLI Sample # SW 6162898  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:02

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1716 SDG#: DX017-16

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

**Sample Description:** SL-022-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5C-SB-9.0-10.0

LLI Sample # SW 6162898  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:02

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1716 SDG#: DX017-16

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### General Sample Comments

State of California Lab Certification No. 2501

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

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### 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      | 10356002     | 12/31/2010 02:25       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401B | 12/31/2010 05:52       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-012-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA5C-SB-4.0-5.0

LLI Sample # SW 6162899  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:05

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1717 SDG#: DX017-17

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-012-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA5C-SB-4.0-5.0

LLI Sample # SW 6162899  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:05

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1717 SDG#: DX017-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0617 JBQ   | 0.00967      | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.136 JBQ    | 0.0141       | 5.56         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0935 J     | 0.0118       | 5.56         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.324 JB     | 0.0121       | 5.56         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.344 JB     | 0.0122       | 5.56         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 7.33 B       | 0.0212       | 5.56         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 93.7 B       | 0.0199       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0793 JQ    | 0.0109       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.168 JBQ    | 0.00744      | 5.56         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.198 JB     | 0.00611      | 5.56         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.107 JBQ    | 0.00933      | 5.56         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.147 JB     | 0.00911      | 5.56         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.159 JBQ    | 0.0103       | 5.56         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.172 JB     | 0.00878      | 5.56         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.25 JB      | 0.00733      | 5.56         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.100 JB     | 0.0103       | 5.56         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.35 JB      | 0.0117       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 63   | 25 - 164 |
| 13C12-12378-PeCDD     | 76   | 25 - 181 |
| 13C12-123478-HxCDD    | 72   | 32 - 141 |
| 13C12-123678-HxCDD    | 72   | 28 - 130 |
| 13C12-123789-HxCDD    | 72   | 28 - 130 |
| 13C12-1234678-HpCDD   | 71   | 23 - 140 |
| 13C12-OCDD            | 65   | 17 - 157 |
| 13C12-2378-TCDF       | 70   | 24 - 169 |
| 13C12-12378-PeCDF     | 70   | 24 - 185 |
| 13C12-23478-PeCDF     | 79   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 69   | 26 - 123 |
| 13C12-234678-HxCDF    | 73   | 28 - 136 |
| 13C12-123789-HxCDF    | 72   | 29 - 147 |
| 13C12-1234678-HpCDF   | 79   | 28 - 143 |
| 13C12-1234789-HpCDF   | 72   | 26 - 138 |
| 13C12-OCDF            | 64   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 72   | 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-012-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6162899  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:05

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1717 SDG#: DX017-17

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

**Sample Description:** SL-012-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA5C-SB-4.0-5.0

LLI Sample # SW 6162899  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:05

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1717 SDG#: DX017-17

## 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      | 10356002     | 12/31/2010 03:22       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401B | 12/31/2010 05:52       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-012-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA5C-SB-9.0-10.0

LLI Sample # SW 6162900  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:14

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1718 SDG#: DX017-18

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 18.2       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-012-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA5C-SB-9.0-10.0

LLI Sample # SW 6162900  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:14

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1718 SDG#: DX017-18

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0149 JB    | 0.0121       | 1.22         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0399 JBQ   | 0.0167       | 6.11         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0187 JQ    | 0.0136       | 6.11         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0557 JBQ   | 0.0142       | 6.11         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0796 JB    | 0.0143       | 6.11         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.28 JB      | 0.0191       | 6.11         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 12.9 B       | 0.0213       | 12.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0211 JQ    | 0.0117       | 1.22         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0310 JBQ   | 0.00770      | 6.11         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0823 JBQ   | 0.00575      | 6.11         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0765 JB    | 0.0101       | 6.11         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0741 JB    | 0.0116       | 6.11         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0729 JBQ   | 0.0119       | 6.11         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.106 JB     | 0.00978      | 6.11         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.479 JB     | 0.00954      | 6.11         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0514 JBQ   | 0.0131       | 6.11         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.541 JB     | 0.0164       | 12.2         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 46   | 25 - 164 |
| 13C12-12378-PeCDD     | 57   | 25 - 181 |
| 13C12-123478-HxCDD    | 57   | 32 - 141 |
| 13C12-123678-HxCDD    | 56   | 28 - 130 |
| 13C12-123789-HxCDD    | 55   | 28 - 130 |
| 13C12-1234678-HpCDD   | 54   | 23 - 140 |
| 13C12-OCDD            | 49   | 17 - 157 |
| 13C12-2378-TCDF       | 52   | 24 - 169 |
| 13C12-12378-PeCDF     | 49   | 24 - 185 |
| 13C12-23478-PeCDF     | 63   | 21 - 178 |
| 13C12-123478-HxCDF    | 59   | 26 - 152 |
| 13C12-123678-HxCDF    | 49   | 26 - 123 |
| 13C12-234678-HxCDF    | 58   | 28 - 136 |
| 13C12-123789-HxCDF    | 56   | 29 - 147 |
| 13C12-1234678-HpCDF   | 62   | 28 - 143 |
| 13C12-1234789-HpCDF   | 56   | 26 - 138 |
| 13C12-OCDF            | 50   | 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

**Sample Description:** SL-012-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA5C-SB-9.0-10.0

LLI Sample # SW 6162900  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:14

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1718 SDG#: DX017-18

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

**Sample Description:** SL-012-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA5C-SB-9.0-10.0

LLI Sample # SW 6162900  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:14

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1718 SDG#: DX017-18

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### General Sample Comments

State of California Lab Certification No. 2501

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

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### 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      | 10356002     | 12/31/2010 04:18       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401B | 12/31/2010 05:52       | William C Schwebel  | 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-013-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5C-SB-4.0-5.0

LLI Sample # SW 6162901  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:44

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1719 SDG#: DX017-19

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 8.8        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-013-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5C-SB-4.0-5.0

LLI Sample # SW 6162901  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:44

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1719 SDG#: DX017-19

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0120 U     | 0.0120       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0628 JB    | 0.0193       | 5.48         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0741 JQ    | 0.0189       | 5.48         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.333 JBQ    | 0.0193       | 5.48         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.231 JB     | 0.0185       | 5.48         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 9.16 B       | 0.0363       | 5.48         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 127 B        | 0.0389       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0367 J     | 0.0141       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0686 JBQ   | 0.0104       | 5.48         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.135 JB     | 0.00735      | 5.48         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.102 JBQ    | 0.0132       | 5.48         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0794 JBQ   | 0.0224       | 5.48         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.120 JB     | 0.0164       | 5.48         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.131 JBQ    | 0.0133       | 5.48         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.14 JB      | 0.0155       | 5.48         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.106 JB     | 0.0221       | 5.48         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.92 JB      | 0.0262       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 65   | 25 - 164 |
| 13C12-12378-PeCDD     | 72   | 25 - 181 |
| 13C12-123478-HxCDD    | 69   | 32 - 141 |
| 13C12-123678-HxCDD    | 67   | 28 - 130 |
| 13C12-123789-HxCDD    | 67   | 28 - 130 |
| 13C12-1234678-HpCDD   | 62   | 23 - 140 |
| 13C12-OCDD            | 53   | 17 - 157 |
| 13C12-2378-TCDF       | 68   | 24 - 169 |
| 13C12-12378-PeCDF     | 57   | 24 - 185 |
| 13C12-23478-PeCDF     | 75   | 21 - 178 |
| 13C12-123478-HxCDF    | 72   | 26 - 152 |
| 13C12-123678-HxCDF    | 44   | 26 - 123 |
| 13C12-234678-HxCDF    | 72   | 28 - 136 |
| 13C12-123789-HxCDF    | 69   | 29 - 147 |
| 13C12-1234678-HpCDF   | 72   | 28 - 143 |
| 13C12-1234789-HpCDF   | 60   | 26 - 138 |
| 13C12-OCDF            | 43   | 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-013-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5C-SB-4.0-5.0

LLI Sample # SW 6162901  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:44

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1719 SDG#: DX017-19

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

**Sample Description:** SL-013-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6162901  
**LLI Group #** 1225036  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/09/2010 13:44

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

**Submitted:** 12/10/2010 09:15

**Reported:** 01/28/2011 16:59

X1719 SDG#: DX017-19

## 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      | 10356002     | 12/31/2010 05:15       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401B | 12/31/2010 05:52       | William C Schwebel  | 1               |

**Sample Description:** SL-013-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5C-SB-9.0-10.0

LLI Sample # SW 6162902  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:52

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1720 SDG#: DX017-20\*

| CAT<br>No.           | Analysis Name                 | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|-------------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                               |            |               |                                   |                                 |                    |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 8.8           | 0.50                              | 0.50                            | 1                  |

**Sample Description:** SL-013-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5C-SB-9.0-10.0

LLI Sample # SW 6162902  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:52

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1720 SDG#: DX017-20\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0205 U     | 0.0205       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0249 U     | 0.0249       | 5.48         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0652 JQ    | 0.0223       | 5.48         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.270 JB     | 0.0221       | 5.48         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.299 JB     | 0.0235       | 5.48         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 4.43 JB      | 0.0311       | 5.48         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 64.2 B       | 0.0452       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0204 U     | 0.0204       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0663 JBQ   | 0.0103       | 5.48         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0794 JB    | 0.00954      | 5.48         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0605 JBQ   | 0.0173       | 5.48         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.129 JB     | 0.0155       | 5.48         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.117 JBQ    | 0.0200       | 5.48         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0968 JBQ   | 0.0160       | 5.48         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.541 JBQ    | 0.0137       | 5.48         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0783 JBQ   | 0.0192       | 5.48         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.07 JB      | 0.0289       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 64   | 25 - 164 |
| 13C12-12378-PeCDD     | 78   | 25 - 181 |
| 13C12-123478-HxCDD    | 72   | 32 - 141 |
| 13C12-123678-HxCDD    | 71   | 28 - 130 |
| 13C12-123789-HxCDD    | 70   | 28 - 130 |
| 13C12-1234678-HpCDD   | 72   | 23 - 140 |
| 13C12-OCDD            | 65   | 17 - 157 |
| 13C12-2378-TCDF       | 69   | 24 - 169 |
| 13C12-12378-PeCDF     | 80   | 24 - 185 |
| 13C12-23478-PeCDF     | 82   | 21 - 178 |
| 13C12-123478-HxCDF    | 72   | 26 - 152 |
| 13C12-123678-HxCDF    | 76   | 26 - 123 |
| 13C12-234678-HxCDF    | 73   | 28 - 136 |
| 13C12-123789-HxCDF    | 70   | 29 - 147 |
| 13C12-1234678-HpCDF   | 81   | 28 - 143 |
| 13C12-1234789-HpCDF   | 71   | 26 - 138 |
| 13C12-OCDF            | 62   | 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-013-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5C-SB-9.0-10.0

LLI Sample # SW 6162902  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:52

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

Submitted: 12/10/2010 09:15

Reported: 01/28/2011 16:59

X1720 SDG#: DX017-20\*

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

**Sample Description:** SL-013-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5C-SB-9.0-10.0

LLI Sample # SW 6162902  
LLI Group # 1225036  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 13:52

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/10/2010 09:15

Suite 210

Reported: 01/28/2011 16:59

Chantilly VA 20151

X1720 SDG#: DX017-20\*

## General Sample Comments

State of California Lab Certification No. 2501

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

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 10356002     | 12/31/2010 06:11       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10356002     | 12/22/2010 10:30       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10364162401B | 12/31/2010 05:52       | William C Schwebel  | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 01/28/11 at 04:59 PM

Group Number: 1225036

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: 10347162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6162893-6162896                  |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 10364162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6162881-6162888                  |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 10364162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6162889-6162891, 6162897-6162902 |                    |                  |                     | 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: 10349001 | Sample number(s): 6162892                          |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.748 U                                            | 0.748              | 2.00             | pg/l                | 105             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 1.56 J                                             | 0.597              | 10.0             | pg/l                | 115             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 1.17 J                                             | 0.417              | 10.0             | pg/l                | 124             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.874 J                                            | 0.439              | 10.0             | pg/l                | 119             |                  | 76-134                 |            |                |
| 123789-HxCDD           | 1.40 J                                             | 0.428              | 10.0             | pg/l                | 120             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 3.15 J                                             | 0.580              | 10.0             | pg/l                | 125             |                  | 70-140                 |            |                |
| OCDD                   | 6.75 J                                             | 0.712              | 20.0             | pg/l                | 134             |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.414 J                                            | 0.376              | 2.00             | pg/l                | 98              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 1.22 J                                             | 0.366              | 10.0             | pg/l                | 111             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 1.70 J                                             | 0.326              | 10.0             | pg/l                | 109             |                  | 68-160                 |            |                |
| 123478-HxCDF           | 1.35 J                                             | 0.343              | 10.0             | pg/l                | 119             |                  | 72-134                 |            |                |
| 123678-HxCDF           | 1.31 J                                             | 0.343              | 10.0             | pg/l                | 122             |                  | 84-130                 |            |                |
| 123789-HxCDF           | 1.86 J                                             | 0.379              | 10.0             | pg/l                | 118             |                  | 78-130                 |            |                |
| 234678-HxCDF           | 1.72 J                                             | 0.329              | 10.0             | pg/l                | 115             |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 5.79 J                                             | 0.346              | 10.0             | pg/l                | 125*            |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 2.97 J                                             | 0.451              | 10.0             | pg/l                | 129             |                  | 78-138                 |            |                |
| OCDF                   | 3.65 J                                             | 0.750              | 20.0             | pg/l                | 133             |                  | 63-170                 |            |                |
| Batch number: 10356002 | Sample number(s): 6162881-6162891, 6162893-6162902 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0474 J                                           | 0.0344             | 1.00             | ng/kg               | 100             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0795 J                                           | 0.0450             | 5.00             | ng/kg               | 103             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0374 U                                           | 0.0374             | 5.00             | ng/kg               | 101             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0718 J                                           | 0.0384             | 5.00             | ng/kg               | 101             |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.116 J                                            | 0.0378             | 5.00             | ng/kg               | 102             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.222 J                                            | 0.0532             | 5.00             | ng/kg               | 102             |                  | 70-140                 |            |                |
| OCDD                   | 0.397 J                                            | 0.0556             | 10.0             | ng/kg               | 100             |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0362 U                                           | 0.0362             | 1.00             | ng/kg               | 104             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.111 J                                            | 0.0193             | 5.00             | ng/kg               | 103             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.156 J                                            | 0.0222             | 5.00             | ng/kg               | 100             |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.228 J                                            | 0.0430             | 5.00             | ng/kg               | 98              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.137 J                                            | 0.0326             | 5.00             | ng/kg               | 98              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.279 J                                            | 0.0528             | 5.00             | ng/kg               | 98              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.279 J                                            | 0.0370             | 5.00             | ng/kg               | 98              |                  | 70-156                 |            |                |

\*- 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: 01/28/11 at 04:59 PM

Group Number: 1225036

| Analysis Name | Blank Result | Blank EDL** | Blank MRL | Report Units | OPR %REC | OPRD %REC | OPR/OPRD Limits | RPD | RPD Max |
|---------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| 1234678-HpCDF | 0.598 J      | 0.0272      | 5.00      | ng/kg        | 98       |           | 82-122          |     |         |
| 1234789-HpCDF | 0.177 J      | 0.0542      | 5.00      | ng/kg        | 97       |           | 78-138          |     |         |
| OCDF          | 0.559 J      | 0.0723      | 10.0      | ng/kg        | 99       |           | 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: 10347162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6162893-6162896                  |          |               |     |         | BKG: P162874<br>9.6 | 9.6      | 1       | 20          |
| Batch number: 10364162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6162881-6162888                  |          |               |     |         | BKG: P162862<br>6.4 | 7.0      | 8       | 20          |
| Batch number: 10364162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6162889-6162891, 6162897-6162902 |          |               |     |         | BKG: P162864<br>8.5 | 8.6      | 1       | 20          |
| Batch number: 10356002                                      | Sample number(s): 6162881-6162891, 6162893-6162902 |          |               |     |         | UNSPK: 6162889      |          |         |             |
| 2378-TCDD                                                   | 100                                                | 100      | 67-158        | 0   | 25      |                     |          |         |             |
| 12378-PeCDD                                                 | 102                                                | 102      | 70-142        | 1   | 25      |                     |          |         |             |
| 123478-HxCDD                                                | 106                                                | 104      | 70-164        | 2   | 25      |                     |          |         |             |
| 123678-HxCDD                                                | 104                                                | 102      | 76-134        | 2   | 25      |                     |          |         |             |
| 123789-HxCDD                                                | 105                                                | 105      | 64-162        | 0   | 25      |                     |          |         |             |
| 1234678-HpCDD                                               | 120                                                | 102      | 70-140        | 14  | 25      |                     |          |         |             |
| OCDD                                                        | 318*                                               | 107      | 78-144        | 72* | 25      |                     |          |         |             |
| 2378-TCDF                                                   | 105                                                | 105      | 75-158        | 0   | 25      |                     |          |         |             |
| 12378-PeCDF                                                 | 105                                                | 103      | 80-134        | 2   | 25      |                     |          |         |             |
| 23478-PeCDF                                                 | 103                                                | 103      | 68-160        | 1   | 25      |                     |          |         |             |
| 123478-HxCDF                                                | 101                                                | 100      | 72-134        | 1   | 25      |                     |          |         |             |
| 123678-HxCDF                                                | 99                                                 | 100      | 84-130        | 1   | 25      |                     |          |         |             |
| 123789-HxCDF                                                | 100                                                | 100      | 78-130        | 0   | 25      |                     |          |         |             |
| 234678-HxCDF                                                | 102                                                | 99       | 70-156        | 3   | 25      |                     |          |         |             |
| 1234678-HpCDF                                               | 101                                                | 99       | 82-122        | 1   | 25      |                     |          |         |             |
| 1234789-HpCDF                                               | 101                                                | 99       | 78-138        | 1   | 25      |                     |          |         |             |
| OCDF                                                        | 105                                                | 100      | 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: 10349001

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6162892 | 32              | 55                | 48                 | 47                 | 49                 | 50                 |
| Blank   | 11*             | 19*               | 18*                | 17*                | 18*                | 17*                |
| OPR     | 18*             | 33                | 30                 | 29                 | 30                 | 28*                |

\*- 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: 01/28/11 at 04:59 PM

Group Number: 1225036

### Surrogate Quality Control

| Limits: | 25-164              | 21-178              | 26-152              | 26-123                   | 28-136             | 29-147             |
|---------|---------------------|---------------------|---------------------|--------------------------|--------------------|--------------------|
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF          | 13C12-1278-TCDD<br>(CRS) | 13C12-12378-PeCDD  | 13C12-123478-HxCDD |
| 6162892 | 46                  | 42                  | 34                  | 52                       | 47                 | 46                 |
| Blank   | 16*                 | 15*                 | 12*                 | 20*                      | 16*                | 17*                |
| OPR     | 27*                 | 24*                 | 18                  | 31*                      | 29                 | 30*                |
| 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  |
| 6162892 | 45                  | 45                  | 43                  | 35                       | 51                 | 53                 |
| Blank   | 16*                 | 17*                 | 16*                 | 12*                      | 18*                | 18*                |
| OPR     | 28                  | 27*                 | 26                  | 19                       | 29                 | 31                 |
| Limits: | 28-130              | 28-130              | 23-140              | 17-157                   | 24-169             | 24-185             |
|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF  | 13C12-123678-HxCDF       | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
| 6162881 | 59                  | 75                  | 74                  | 77                       | 74                 | 72                 |
| 6162882 | 68                  | 82                  | 80                  | 87                       | 80                 | 79                 |
| 6162883 | 57                  | 74                  | 74                  | 80                       | 74                 | 70                 |
| 6162884 | 55                  | 72                  | 73                  | 81                       | 73                 | 72                 |
| 6162885 | 68                  | 87                  | 82                  | 85                       | 81                 | 80                 |
| 6162886 | 69                  | 82                  | 79                  | 84                       | 79                 | 79                 |
| 6162887 | 68                  | 80                  | 78                  | 83                       | 78                 | 76                 |
| 6162888 | 68                  | 81                  | 79                  | 84                       | 78                 | 72                 |
| 6162889 | 70                  | 85                  | 78                  | 82                       | 79                 | 77                 |
| 6162890 | 57                  | 73                  | 67                  | 71                       | 66                 | 67                 |
| 6162891 | 60                  | 79                  | 80                  | 81                       | 79                 | 76                 |
| 6162893 | 66                  | 78                  | 74                  | 82                       | 75                 | 69                 |
| 6162894 | 59                  | 73                  | 70                  | 75                       | 69                 | 64                 |
| 6162895 | 39                  | 47                  | 44                  | 50                       | 46                 | 42                 |
| 6162896 | 71                  | 79                  | 75                  | 78                       | 77                 | 77                 |
| 6162897 | 58                  | 68                  | 63                  | 41                       | 65                 | 63                 |
| 6162898 | 62                  | 80                  | 73                  | 72                       | 74                 | 74                 |
| 6162899 | 63                  | 79                  | 74                  | 69                       | 73                 | 72                 |
| 6162900 | 46                  | 63                  | 59                  | 49                       | 58                 | 56                 |
| 6162901 | 65                  | 75                  | 72                  | 44                       | 72                 | 69                 |
| 6162902 | 64                  | 82                  | 72                  | 76                       | 73                 | 70                 |
| Blank   | 49                  | 47                  | 42                  | 53                       | 46                 | 39                 |
| MS      | 57                  | 73                  | 67                  | 71                       | 66                 | 67                 |
| MSD     | 60                  | 79                  | 80                  | 81                       | 79                 | 76                 |
| OPR     | 52                  | 71                  | 68                  | 73                       | 68                 | 66                 |
| Limits: | 25-164              | 21-178              | 26-152              | 26-123                   | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF          | 13C12-1278-TCDD<br>(CRS) | 13C12-12378-PeCDD  | 13C12-123478-HxCDD |
| 6162881 | 82                  | 74                  | 69                  | 66                       | 72                 | 72                 |
| 6162882 | 92                  | 80                  | 77                  | 74                       | 80                 | 79                 |
| 6162883 | 90                  | 73                  | 68                  | 68                       | 73                 | 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: 01/28/11 at 04:59 PM

Group Number: 1225036

### Surrogate Quality Control

|         |                    |                    |                     |            |                 |                   |
|---------|--------------------|--------------------|---------------------|------------|-----------------|-------------------|
| 6162884 | 94                 | 71                 | 65                  | 65         | 70              | 74                |
| 6162885 | 88                 | 84                 | 79                  | 77         | 80              | 78                |
| 6162886 | 95                 | 77                 | 70                  | 78         | 78              | 77                |
| 6162887 | 88                 | 76                 | 70                  | 75         | 74              | 75                |
| 6162888 | 95                 | 70                 | 62                  | 75         | 76              | 75                |
| 6162889 | 93                 | 76                 | 67                  | 74         | 79              | 76                |
| 6162890 | 73                 | 67                 | 63                  | 63         | 69              | 64                |
| 6162891 | 85                 | 81                 | 77                  | 68         | 75              | 76                |
| 6162893 | 104                | 66                 | 53                  | 71         | 74              | 74                |
| 6162894 | 84                 | 67                 | 60                  | 68         | 69              | 67                |
| 6162895 | 56                 | 42                 | 36                  | 43         | 43              | 43                |
| 6162896 | 81                 | 75                 | 66                  | 72         | 74              | 72                |
| 6162897 | 71                 | 61                 | 54                  | 68         | 66              | 62                |
| 6162898 | 81                 | 72                 | 65                  | 73         | 76              | 73                |
| 6162899 | 79                 | 72                 | 64                  | 72         | 76              | 72                |
| 6162900 | 62                 | 56                 | 50                  | 56         | 57              | 57                |
| 6162901 | 72                 | 60                 | 43                  | 68         | 72              | 69                |
| 6162902 | 81                 | 71                 | 62                  | 71         | 78              | 72                |
| Blank   | 74                 | 44                 | 43                  | 44         | 54              | 53                |
| MS      | 73                 | 67                 | 63                  | 63         | 69              | 64                |
| MSD     | 85                 | 81                 | 77                  | 68         | 75              | 76                |
| OPR     | 82                 | 69                 | 65                  | 66         | 69              | 71                |
| <hr/>   |                    |                    |                     |            |                 |                   |
| 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 |
| 6162881 | 72                 | 71                 | 74                  | 72         | 64              | 76                |
| 6162882 | 80                 | 79                 | 82                  | 81         | 72              | 86                |
| 6162883 | 73                 | 73                 | 77                  | 75         | 60              | 77                |
| 6162884 | 73                 | 71                 | 76                  | 74         | 58              | 76                |
| 6162885 | 79                 | 78                 | 80                  | 78         | 77              | 86                |
| 6162886 | 78                 | 77                 | 80                  | 79         | 74              | 84                |
| 6162887 | 74                 | 75                 | 76                  | 74         | 72              | 81                |
| 6162888 | 75                 | 74                 | 76                  | 72         | 75              | 81                |
| 6162889 | 75                 | 76                 | 77                  | 75         | 76              | 83                |
| 6162890 | 64                 | 64                 | 66                  | 64         | 62              | 74                |
| 6162891 | 77                 | 74                 | 79                  | 76         | 67              | 77                |
| 6162893 | 72                 | 74                 | 75                  | 72         | 71              | 82                |
| 6162894 | 67                 | 66                 | 70                  | 67         | 66              | 76                |
| 6162895 | 44                 | 44                 | 45                  | 43         | 44              | 51                |
| 6162896 | 71                 | 75                 | 74                  | 71         | 75              | 81                |
| 6162897 | 63                 | 63                 | 62                  | 58         | 61              | 53                |
| 6162898 | 72                 | 71                 | 73                  | 67         | 67              | 73                |
| 6162899 | 72                 | 72                 | 71                  | 65         | 70              | 70                |
| 6162900 | 56                 | 55                 | 54                  | 49         | 52              | 49                |
| 6162901 | 67                 | 67                 | 62                  | 53         | 68              | 57                |
| 6162902 | 71                 | 70                 | 72                  | 65         | 69              | 80                |
| Blank   | 53                 | 54                 | 61                  | 58         | 39              | 55                |
| MS      | 64                 | 64                 | 66                  | 64         | 62              | 74                |
| MSD     | 77                 | 74                 | 79                  | 76         | 67              | 77                |
| OPR     | 69                 | 69                 | 72                  | 70         | 58              | 70                |
| <hr/>   |                    |                    |                     |            |                 |                   |
| 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.

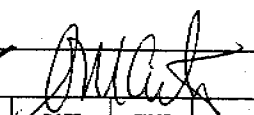
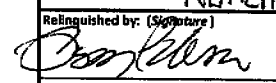
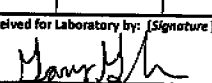
acct#13013 Cp#1225036 Sample# 6162881-902

CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |         |               |        |                                         |                          | CHAIN OF CUSTODY RECORD |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        | Other Instructions and Notes |                     |                              |                        |                     |                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------|--------|-----------------------------------------|--------------------------|-------------------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|----------------------|--------------------------|--------------------|------------------------|------------------------------|---------------------|------------------------------|------------------------|---------------------|----------------------|
| NOTES:<br>*Primary Analyses as Indicated on sample labels<br>**Secondary Analyses as Indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |         |               |        |                                         |                          | VOCs/EPA 8260B          | 1,4-Dioxane EPA 8260SIM | SVOCs EPA 8270C & PAHs 8270 SIM | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/60208&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A |                              | **Cyanide EPA 9012B | **pH EPA 9045C               | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                             | DATE    | TIME          | MATRIX | Preservative                            | Type & No. of Containers |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| SL-015-SA5C-SB-4.0-5.0                                                                                                                                                    | 12/8/10 | 1422          | soil   | none                                    | 2 x 16 oz. jars          |                         |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| SL-015-SA5C-SB-4.0-5.0                                                                                                                                                    | 12/8/10 | 1433          | soil   | none                                    | 1 x 16 oz. jar           |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      | X                    | X                        | X                  | X                      | X                            | X                   | X                            |                        |                     |                      |
| SL-015-SA5C-SB-4.0-5.0                                                                                                                                                    | 12/8/10 | 1433          | soil   | none                                    | 3 x 4 oz. jars           |                         |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              | X                      | X                   |                      |
| SL-015-SA5C-SB-9.0-10.0                                                                                                                                                   | 12/8/10 | 1440          | soil   | none                                    | 2 x 16 oz. jars          |                         |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| SL-015-SA5C-SB-9.0-10.0                                                                                                                                                   | 12/8/10 | 1440          | soil   | none                                    | 1 x 16 oz. jar           |                         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      | X                    | X                        | X                  | X                      | X                            | X                   | X                            |                        |                     |                      |
| SL-015-SA5C-SB-9.0-10.0                                                                                                                                                   | 12/8/10 | 1440          | soil   | none                                    | 3 x 4 oz. jars           |                         |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              | X                      | X                   |                      |
| SL-020-SA5C-SB-4.0-5.0                                                                                                                                                    | 12/8/10 | 0955          | soil   | none                                    | 2 x 16 oz. jars          |                         |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| SL-020-SA5C-SB-4.0-5.0                                                                                                                                                    | 12/8/10 | 0955          | soil   | none                                    | 3 x 4 oz. jars           |                         |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              | X                      | X                   |                      |
| SL-020-SA5C-SB-7.5-8.5                                                                                                                                                    | 12/8/10 | 1000          | soil   | none                                    | 3 x 4 oz. jars           |                         |                         |                                 | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              | X                      | X                   |                      |
| SL-015-SA5C-SB-4.5                                                                                                                                                        | 12/8/10 | 1423          | soil   | none                                    | 5 Encore samplers        |                         | X                       | X                               | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| SL-015-SA5C-SB-9.5                                                                                                                                                        | 12/8/10 | 1435          | soil   | none                                    | 5 Encore samplers        |                         | X                       | X                               | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| SL-020-SA5C-SB-4.5                                                                                                                                                        | 12/8/10 | 0950          | soil   | none                                    | 5 Encore samplers        |                         | X                       | X                               | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| SL-020-SA5C-SB-8.0                                                                                                                                                        | 12/8/10 | 0958          | soil   | none                                    | 5 Encore samplers        |                         | X                       | X                               | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| SL-021-SA5C-SB-4.5                                                                                                                                                        | 12/8/10 | 1150          | soil   | none                                    | 5 Encore samplers        |                         | X                       | X                               | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| SL-021-SA5C-SB-9.5                                                                                                                                                        | 12/8/10 | 1158          | soil   | none                                    | 5 Encore samplers        |                         | X                       | X                               | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| TB-120810                                                                                                                                                                 | 12/8/10 | 1630          | water  | HCl                                     | 4 - 40 ml vials          |                         | X                       | X                               | X                 |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |
| Relinquished by: (Signature)                                                                                                                                              |         | Date/Time     |        | Received for Laboratory by: (Signature) |                          | Date/Time               |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     | Laboratory:                  |                        |                     |                      |
| <i>[Signature]</i>                                                                                                                                                        |         | 12.08.10 1630 |        | <i>[Signature]</i>                      |                          | 12/10/10 915            |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     | Lancaster Laboratories, Inc. |                        |                     |                      |
| Received by: (Signature)                                                                                                                                                  |         | Date/Time     |        | Airbill No.                             |                          | Tracking Number         |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     | Cooler 1                     |                        |                     |                      |
|                                                                                                                                                                           |         |               |        | 00732992                                |                          | 869514318211            |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                      |                          |                    |                        |                              |                     |                              |                        |                     |                      |

acct#13013 Cp#1225036 sample#6162881-902

CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                       |         |                            |        |                                                                                                                            |                          | CHAIN OF CUSTODY RECORD      |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            |                                          |                      |                          |                    |                        | Other Instructions and Notes |                |                                             |                     |                      |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------------|--------|----------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|--------------------------------------------|------------------------------------------|----------------------|--------------------------|--------------------|------------------------|------------------------------|----------------|---------------------------------------------|---------------------|----------------------|--|
| NOTES:                                                                                                                                                          |         |                            |        |                                                                                                                            |                          |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            |                                          |                      |                          |                    |                        |                              |                |                                             |                     |                      |  |
| *Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |         |                            |        |                                                                                                                            |                          |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            |                                          |                      |                          |                    |                        |                              |                |                                             |                     |                      |  |
| Samples: (Signature)                                                           |         |                            |        |                                                                                                                            |                          | VOCs/EPA 8260B               | 1,4-Dioxane EPA 8260S1M | SVOCs EPA 8270C & PAHs 8270 SIM | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081-A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B          | **pH EPA 9045C | **Terphenyls EPA 8015B                      | **Glycols EPA 8015B | **Alcohols EPA 8015B |  |
| SAMPLE NUMBER                                                                                                                                                   | DATE    | TIME                       | MATRIX | Preservative                                                                                                               | Type & No. of Containers |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            |                                          |                      |                          |                    |                        |                              |                |                                             |                     |                      |  |
| SL-020-SA5C-SB-4.0-5.0                                                                                                                                          | 12/8/10 | 0955                       | soil   | none                                                                                                                       | 1 x 16 oz. jar           |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            | X                                        | X                    | X                        | X                  | X                      | X                            |                |                                             |                     |                      |  |
| SL-020-SA5C-SB-7.5-8.5                                                                                                                                          | 12/8/10 | 1000                       | soil   | none                                                                                                                       | 2 x 16 oz. jars          |                              |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      | X                                    |                                            |                                          |                      |                          |                    |                        |                              |                |                                             |                     |                      |  |
| SL-020-SA5C-SB-7.5-8.5                                                                                                                                          | 12/8/10 | 1000                       | soil   | none                                                                                                                       | 1 x 15 oz. jar           |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            | X                                        | X                    | X                        | X                  | X                      | X                            |                |                                             |                     |                      |  |
| SL-016-SA5C-SB-4.0-5.0                                                                                                                                          | 12/8/10 | 1610                       | soil   | none                                                                                                                       | 2 x 15 oz. jars          |                              |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      | X                                    |                                            |                                          | X                    | X                        | X                  | X                      | X                            | X              |                                             |                     |                      |  |
| SL-016-SA5C-SB-4.0-5.0                                                                                                                                          | 12/8/10 | 1610                       | soil   | none                                                                                                                       | 1 x 16 oz. jar           |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            | X                                        | X                    | X                        | X                  | X                      | X                            | X              |                                             |                     |                      |  |
| SL-016-SA5C-SB-9.0-10.0                                                                                                                                         | 12/8/10 | 1623                       | soil   | none                                                                                                                       | 2 x 16 oz. jars          |                              |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      | X                                    |                                            |                                          |                      |                          |                    |                        |                              |                |                                             |                     |                      |  |
| SL-016-SA5C-SB-9.0-10.0                                                                                                                                         | 12/8/10 | 1623                       | soil   | none                                                                                                                       | 1 x 16 oz. jar           |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            | X                                        | X                    | X                        | X                  | X                      | X                            | X              |                                             |                     |                      |  |
| SL-021-SA5C-SB-4.0-5.0                                                                                                                                          | 12/8/10 | 1155                       | soil   | none                                                                                                                       | 2 x 16 oz. jars          |                              |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      | X                                    |                                            |                                          |                      |                          |                    |                        |                              |                |                                             |                     |                      |  |
| SL-021-SA5C-SB-4.0-5.0                                                                                                                                          | 12/8/10 | 1155                       | soil   | none                                                                                                                       | 1 x 16 oz. jar           |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            | X                                        | X                    | X                        | X                  | X                      | X                            | X              |                                             |                     |                      |  |
| SL-021-SA5C-SB-9.0-10.0                                                                                                                                         | 12/8/10 | 1200                       | soil   | none                                                                                                                       | 2 x 16 oz. jars          |                              |                         | X                               |                   |                        | X                            | X                     | X                   | X              | X                       | X                      | X                                    |                                            |                                          |                      |                          |                    |                        |                              |                |                                             |                     |                      |  |
| SL-021-SA5C-SB-9.0-10.0                                                                                                                                         | 12/8/10 | 1200                       | soil   | none                                                                                                                       | 1 x 16 oz. jar           |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            | X                                        | X                    | X                        | X                  | X                      | X                            | X              |                                             |                     |                      |  |
| SL-018-SA5B-SS-0.0-0.5MS                                                                                                                                        | 12/8/10 | 1530                       | soil   | none                                                                                                                       | 2 x 16 oz. jar           |                              |                         |                                 |                   |                        | X                            | X                     | X                   | X              | X                       | X                      | X                                    |                                            |                                          |                      |                          |                    |                        |                              |                |                                             |                     | Matrix spike         |  |
| SL-018-SA5B-SS-0.0-0.5MS                                                                                                                                        | 12/8/10 | 1530                       | soil   | none                                                                                                                       | 2 x 16 oz. jar           |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            | X                                        | X                    | X                        | X                  | X                      | X                            | X              | X                                           |                     | Matrix spike         |  |
| Sample ID was updated per PBO on 12/8/10.                                                                                                                       |         |                            |        |                                                                                                                            |                          |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            |                                          |                      |                          |                    |                        |                              |                |                                             |                     |                      |  |
| NLN 12/11/10                                                                                                                                                    |         |                            |        |                                                                                                                            |                          |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            |                                          |                      |                          |                    |                        |                              |                |                                             |                     |                      |  |
| Relinquished by: (Signature)                                                  |         | Date/Time<br>12.08.10 1630 |        | Received for Laboratory by: (Signature)  |                          | Date/Time<br>12/10/10 945    |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            |                                          |                      |                          |                    |                        |                              |                | Laboratory:<br>Lancaster Laboratories, Inc. |                     |                      |  |
| Received by: (Signature)                                                                                                                                        |         | Date/Time                  |        | Airbill No.<br>00732992                                                                                                    |                          | Tracking Number 869514317259 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                            |                                          |                      |                          |                    |                        |                              |                | Cooler 4                                    |                     |                      |  |

acct# 13013 Cp# 1225036 Sample# 6162881-902

CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |         |                            |        |                                                               |                          | CHAIN OF CUSTODY RECORD      |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        | Other Instructions and Notes |                     |                |                        |                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------------|--------|---------------------------------------------------------------|--------------------------|------------------------------|-------------------------|---------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|---------------------------------------------|------------------------------------------|----------------------|--------------------------|--------------------|------------------------|------------------------------|---------------------|----------------|------------------------|---------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |         |                            |        |                                                               |                          | VOCs/EPA 8260B               | 1,4-Dioxane EPA 8260SIM | SVOCs EPA 8270C & PAHs 8270 SIM | TPH-GHO EPA 8015B | TPH-EPH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only)   | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A |                              | **Cyanide EPA 9012B | **pH EPA 9045C | **Terphenyls EPA 8015B | **Glycols EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                             | DATE    | TIME                       | MATRIX | Preservative                                                  | Type & No. of Containers |                              |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| EB-01-SA5B-120910                                                                                                                                                         | 12/9/10 | 1210                       | water  | none                                                          | 7-1 liter amber          |                              |                         | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      | X                                           | X                                        |                      |                          |                    |                        |                              |                     |                |                        |                     |
| EB-01-SA5B-120910                                                                                                                                                         | 12/9/10 | 1210                       | water  | none                                                          | 1-500 ml poly            |                              |                         |                                 |                   |                        |                              | X                     | X                   |                |                         | X                      |                                      |                                             |                                          |                      |                          |                    |                        | X                            |                     |                |                        |                     |
| EB-01-SA5B-120910                                                                                                                                                         | 12/9/10 | 1210                       | water  | HNO3                                                          | 1-500 ml poly            |                              |                         |                                 |                   |                        | X                            |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-017-SA5C-SB-4.5                                                                                                                                                        | 12/9/10 | 1016                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-017-SA5C-SB-9.5                                                                                                                                                        | 12/9/10 | 1028                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-022-SA5C-SB-4.5                                                                                                                                                        | 12/9/10 | 0949                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-022-SA5C-SB-9.5                                                                                                                                                        | 12/9/10 | 1000                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-012-SA5C-SB-4.5                                                                                                                                                        | 12/9/10 | 1300                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-012-SA5C-SB-9.5                                                                                                                                                        | 12/9/10 | 1310                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-020-SA5B-SS-0.0-0.5                                                                                                                                                    | 12/9/10 | 0840                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-014-SA5B-SS-0.0-0.5                                                                                                                                                    | 12/9/10 | 0915                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-018-SA5B-SS-0.0-0.5                                                                                                                                                    | 12/9/10 | 0845                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-011-SA5B-SS-0.0-0.5                                                                                                                                                    | 12/9/10 | 0905                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-013-SA5C-SB-9.5                                                                                                                                                        | 12/9/10 | 1348                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| SL-013-SA5C-SB-4.5                                                                                                                                                        | 12/9/10 | 1340                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| TB-120910                                                                                                                                                                 | 12/9/10 | 1630                       | soil   | none                                                          | 5 Encore samplers        | X                            | X                       | X                               |                   |                        |                              |                       |                     |                |                         |                        |                                      |                                             |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| Relinquished by: (Signature)                                                                                                                                              |         | Date/Time<br>12.09.10 1630 |        | Received for Laboratory by: (Signature)<br><i>[Signature]</i> |                          | Date/Time<br>12/10/10 915    |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      | Laboratory:<br>Lancaster Laboratories, Inc. |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |
| Received by: (Signature)                                                                                                                                                  |         | Date/Time                  |        | Airbill No.<br>00732992                                       |                          | Tracking Number 869514317774 |                         |                                 |                   |                        |                              |                       |                     |                |                         |                        |                                      | Cooler 4                                    |                                          |                      |                          |                    |                        |                              |                     |                |                        |                     |

869514317774



Sample # 6162881-902

[illegible]

acct#13013      Cp# 1225036

Cup# 1225036

Sample # 6162881-902

### CHAIN OF CUSTODY RECORD

[illegible]

869514317237

# Explanation of Symbols and Abbreviations

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

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | 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.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | 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. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | 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

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

### Inorganic Qualifiers

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

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

January 11, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/11/2010

Group Number: 1225038

SDG: DX018

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample DescriptionSL-017-SA5C-SB-4.0-5.0 Soil  
SL-017-SA5C-SB-9.0-10.0 Soil  
SL-008-SA5B-SS-0.0-0.5 Soil  
SL-009-SA5B-SS-0.0-0.5 Soil  
SL-228-SA5B-SS-0.0-0.5 Soil  
SL-229-SA5B-SS-0.0-0.5 Soil  
SL-048-SA5B-SS-0.0-0.5 Soil  
SL-051-SA5B-SS-0.0-0.5 Soil  
SL-062-SA5B-SS-0.0-0.5 Soil  
SL-064-SA5B-SS-0.0-0.5 Soil  
SL-232-SA5B-SS-0.0-0.5 Soil  
SL-233-SA5B-SS-0.0-0.5 Soil  
SL-299-SA5B-SS-0.0-0.5 Soil  
SL-300-SA5B-SS-0.0-0.5 Soil  
SL-067-SA5B-SS-0.0-0.5 Soil  
SL-059-SA5B-SS-0.0-0.5 Soil  
SL-065-SA5B-SS-0.0-0.5 Soil  
SL-061-SA5B-SS-0.0-0.5 Soil  
SL-070-SA5B-SS-0.0-0.5 SoilLancaster Labs (LLI) #6162922  
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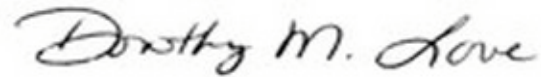
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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,



Dorothy M. Love  
Group Leader

**Sample Description:** SL-017-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5C-SB-4.0-5.0

LLI Sample # SW 6162922  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:20

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1801 SDG#: DX018-01

| CAT<br>No.           | Analysis Name                 | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|-------------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                               |            |               |                                   |                                 |                    |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.8           | 0.50                              | 0.50                            | 1                  |

**Sample Description:** SL-017-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5C-SB-4.0-5.0

LLI Sample # SW 6162922  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:20

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1801 SDG#: DX018-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0478 U     | 0.0478       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0445 U     | 0.0445       | 5.54         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0623 JBQ   | 0.0327       | 5.54         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.132 JB     | 0.0336       | 5.54         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.305 JBQ    | 0.0341       | 5.54         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.491 JBQ    | 0.0523       | 5.54         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.98 JB      | 0.0764       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0640 JQ    | 0.0353       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0806 JBQ   | 0.0218       | 5.54         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.116 JBQ    | 0.0208       | 5.54         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.105 JB     | 0.0258       | 5.54         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.149 JB     | 0.0241       | 5.54         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.252 JB     | 0.0313       | 5.54         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.163 JBQ    | 0.0246       | 5.54         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.564 JB     | 0.0753       | 5.54         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.110 U      | 0.110        | 5.54         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.483 JB     | 0.0837       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 59   | 25 - 164 |
| 13C12-12378-PeCDD     | 70   | 25 - 181 |
| 13C12-123478-HxCDD    | 70   | 32 - 141 |
| 13C12-123678-HxCDD    | 70   | 28 - 130 |
| 13C12-123789-HxCDD    | 69   | 28 - 130 |
| 13C12-1234678-HpCDD   | 69   | 23 - 140 |
| 13C12-OCDD            | 61   | 17 - 157 |
| 13C12-2378-TCDF       | 62   | 24 - 169 |
| 13C12-12378-PeCDF     | 75   | 24 - 185 |
| 13C12-23478-PeCDF     | 75   | 21 - 178 |
| 13C12-123478-HxCDF    | 72   | 26 - 152 |
| 13C12-123678-HxCDF    | 76   | 26 - 123 |
| 13C12-234678-HxCDF    | 73   | 28 - 136 |
| 13C12-123789-HxCDF    | 68   | 29 - 147 |
| 13C12-1234678-HpCDF   | 81   | 28 - 143 |
| 13C12-1234789-HpCDF   | 67   | 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-017-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6162922  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:20

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1801 SDG#: DX018-01

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

**Sample Description:** SL-017-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5C-SB-4.0-5.0

LLI Sample # SW 6162922  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:20

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1801 SDG#: DX018-01

## 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      | 10357002     | 12/29/2010 23:28       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10357162401A | 12/23/2010 21:06       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** SL-017-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5C-SB-9.0-10.0

LLI Sample # SW 6162923  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:30

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1802 SDG#: DX018-02

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 10.6       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-017-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5C-SB-9.0-10.0

LLI Sample # SW 6162923  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:30

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1802 SDG#: DX018-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0510 U     | 0.0510       | 1.12         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0938 JBQ   | 0.0560       | 5.59         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0413 JBQ   | 0.0402       | 5.59         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0862 JBQ   | 0.0413       | 5.59         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0455 JBQ   | 0.0403       | 5.59         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.283 JB     | 0.0736       | 5.59         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.37 JB      | 0.112        | 11.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0346 U     | 0.0346       | 1.12         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0431 JBQ   | 0.0234       | 5.59         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.144 JBQ    | 0.0230       | 5.59         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.196 JBQ    | 0.0406       | 5.59         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.127 JBQ    | 0.0362       | 5.59         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.126 JBQ    | 0.0478       | 5.59         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.173 JBQ    | 0.0383       | 5.59         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.653 JBQ    | 0.112        | 5.59         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.359 JBQ    | 0.162        | 5.59         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.627 JBQ    | 0.140        | 11.2         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 41   | 25 - 164 |
| 13C12-12378-PeCDD     | 49   | 25 - 181 |
| 13C12-123478-HxCDD    | 47   | 32 - 141 |
| 13C12-123678-HxCDD    | 48   | 28 - 130 |
| 13C12-123789-HxCDD    | 48   | 28 - 130 |
| 13C12-1234678-HpCDD   | 45   | 23 - 140 |
| 13C12-OCDD            | 40   | 17 - 157 |
| 13C12-2378-TCDF       | 44   | 24 - 169 |
| 13C12-12378-PeCDF     | 53   | 24 - 185 |
| 13C12-23478-PeCDF     | 52   | 21 - 178 |
| 13C12-123478-HxCDF    | 50   | 26 - 152 |
| 13C12-123678-HxCDF    | 53   | 26 - 123 |
| 13C12-234678-HxCDF    | 50   | 28 - 136 |
| 13C12-123789-HxCDF    | 47   | 29 - 147 |
| 13C12-1234678-HpCDF   | 55   | 28 - 143 |
| 13C12-1234789-HpCDF   | 45   | 26 - 138 |
| 13C12-OCDF            | 38   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 47   | 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-017-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5C-SB-9.0-10.0

LLI Sample # SW 6162923  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:30

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1802 SDG#: DX018-02

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



# Analysis Report

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**Sample Description:** SL-017-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5C-SB-9.0-10.0

LLI Sample # SW 6162923  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/09/2010 10:30

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1802 SDG#: DX018-02

## 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      | 10357002     | 12/30/2010 00:24       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10357162401A | 12/23/2010 21:06       | Scott W Freisher    | 1               |

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



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-008-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5B-SS-0.0-0.5

LLI Sample # SW 6162924  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:22

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1803 SDG#: DX018-03

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 3.5        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-008-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5B-SS-0.0-0.5

LLI Sample # SW 6162924  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:22

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1803 SDG#: DX018-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 1.79         | 0.0681       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 18.2 B       | 0.120        | 5.18         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 37.8 B       | 0.230        | 5.18         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 192 B        | 0.231        | 5.18         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 74.6 B       | 0.240        | 5.18         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6,770 EB     | 0.865        | 5.18         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 130,000 EB   | 0.707        | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 1.82         | 0.106        | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 8.91 B       | 0.0587       | 5.18         | 1               |
| 11031                 | 123478-PeCDF  | 57117-31-4       | 17.1 B       | 0.0489       | 5.18         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 56.2 B       | 0.198        | 5.18         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 35.5 B       | 0.191        | 5.18         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 24.4 B       | 0.225        | 5.18         | 1               |
| 11031                 | 1234678-HxCDF | 60851-34-5       | 40.2 B       | 0.186        | 5.18         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1,120 B      | 0.180        | 5.18         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 74.5 B       | 0.248        | 5.18         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3,940 B      | 0.162        | 10.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 67   | 25 - 164 |
| 13C12-12378-PeCDD     | 77   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 74   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 79   | 23 - 140 |
| 13C12-OCDD            | 76   | 17 - 157 |
| 13C12-2378-TCDF       | 73   | 24 - 169 |
| 13C12-12378-PeCDF     | 73   | 24 - 185 |
| 13C12-123478-PeCDF    | 80   | 21 - 178 |
| 13C12-123478-HxCDF    | 78   | 26 - 152 |
| 13C12-123678-HxCDF    | 74   | 26 - 123 |
| 13C12-1234678-HxCDF   | 78   | 28 - 136 |
| 13C12-123789-HxCDF    | 75   | 29 - 147 |
| 13C12-1234678-HpCDF   | 87   | 28 - 143 |
| 13C12-1234789-HpCDF   | 78   | 26 - 138 |
| 13C12-OCDF            | 76   | 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

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

**Sample Description:** SL-008-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162924  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:22

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1803 SDG#: DX018-03

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

**Sample Description:** SL-008-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5B-SS-0.0-0.5

LLI Sample # SW 6162924  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:22

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/11/2010 09:40

Suite 210

Reported: 01/11/2011 18:50

Chantilly VA 20151

X1803 SDG#: DX018-03

## 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      | 10357002     | 12/30/2010 01:21       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401A | 12/15/2010 09:13       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-009-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5B-SS-0.0-0.5

LLI Sample # SW 6162925  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:25

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1804 SDG#: DX018-04

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 6.6        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-009-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162925  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:25

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1804 SDG#: DX018-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.887<br>J   | 0.0425       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 8.89<br>B    | 0.108        | 5.35         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 18.7<br>B    | 0.130        | 5.35         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 75.1<br>B    | 0.135        | 5.35         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 34.7<br>B    | 0.141        | 5.35         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2,610<br>EB  | 0.530        | 5.35         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 42,300<br>EB | 0.464        | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.696<br>J   | 0.0713       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 3.44<br>JB   | 0.0412       | 5.35         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 6.69<br>B    | 0.0404       | 5.35         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 22.3<br>B    | 0.108        | 5.35         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 14.1<br>B    | 0.100        | 5.35         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 8.64<br>B    | 0.124        | 5.35         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 16.2<br>B    | 0.102        | 5.35         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 425<br>B     | 0.129        | 5.35         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 29.5<br>B    | 0.172        | 5.35         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1,480<br>B   | 0.117        | 10.7         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 67   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 73   | 28 - 130 |
| 13C12-123789-HxCDD  | 72   | 28 - 130 |
| 13C12-1234678-HpCDD | 75   | 23 - 140 |
| 13C12-OCDD          | 73   | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 81   | 24 - 185 |
| 13C12-23478-PeCDF   | 82   | 21 - 178 |
| 13C12-123478-HxCDF  | 75   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 75   | 28 - 136 |

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

**Sample Description:** SL-009-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5B-SS-0.0-0.5

LLI Sample # SW 6162925  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:25

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1804 SDG#: DX018-04

| CAT No.                  | Analysis Name         | CAS Number  | Dry Result     | Dry EDL* | Dry MRL | Dilution Factor |
|--------------------------|-----------------------|-------------|----------------|----------|---------|-----------------|
| <b>Labeled Compounds</b> |                       |             |                |          |         |                 |
|                          |                       | <b>%Rec</b> | <b>Windows</b> |          |         |                 |
|                          | 13C12-123789-HxCDF    | 73          | 29 - 147       |          |         |                 |
|                          | 13C12-1234678-HpCDF   | 80          | 28 - 143       |          |         |                 |
|                          | 13C12-1234789-HpCDF   | 74          | 26 - 138       |          |         |                 |
|                          | 13C12-OCDF            | 69          | 17 - 157       |          |         |                 |
|                          | 13C12-1278-TCDD (CRS) | 72          | 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-009-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5B-SS-0.0-0.5

LLI Sample # SW 6162925  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/11/2010 09:40

Suite 210

Reported: 01/11/2011 18:50

Chantilly VA 20151

X1804 SDG#: DX018-04

## 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      | 10357002     | 12/30/2010 02:17       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401A | 12/15/2010 09:13       | William C Schwebel  | 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-228-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-228-SA5B-SS-0.0-0.5

LLI Sample # SW 6162926  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:12

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1805 SDG#: DX018-05

| 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.       | 27.5       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-228-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-228-SA5B-SS-0.0-0.5

LLI Sample # SW 6162926  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:12

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1805 SDG#: DX018-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0541 JQ    | 0.0361       | 1.38         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.381 JBQ    | 0.0852       | 6.90         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.619 JB     | 0.0935       | 6.90         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.74 JB      | 0.0983       | 6.90         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.15 JB      | 0.0997       | 6.90         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 42.2 B       | 0.119        | 6.90         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 407 B        | 0.149        | 13.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.459 JQ     | 0.0699       | 1.38         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.483 JB     | 0.0501       | 6.90         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.608 JBQ    | 0.0459       | 6.90         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.32 JB      | 0.108        | 6.90         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.552 JB     | 0.0993       | 6.90         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.617 JB     | 0.135        | 6.90         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.736 JB     | 0.110        | 6.90         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 7.50 B       | 0.0774       | 6.90         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 8.35 B       | 0.104        | 6.90         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 14.6 B       | 0.0636       | 13.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 64   | 25 - 164 |
| 13C12-12378-PeCDD     | 72   | 25 - 181 |
| 13C12-123478-HxCDD    | 70   | 32 - 141 |
| 13C12-123678-HxCDD    | 70   | 28 - 130 |
| 13C12-123789-HxCDD    | 68   | 28 - 130 |
| 13C12-1234678-HpCDD   | 68   | 23 - 140 |
| 13C12-OCDD            | 62   | 17 - 157 |
| 13C12-2378-TCDF       | 68   | 24 - 169 |
| 13C12-12378-PeCDF     | 75   | 24 - 185 |
| 13C12-23478-PeCDF     | 75   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 76   | 26 - 123 |
| 13C12-234678-HxCDF    | 70   | 28 - 136 |
| 13C12-123789-HxCDF    | 66   | 29 - 147 |
| 13C12-1234678-HpCDF   | 80   | 28 - 143 |
| 13C12-1234789-HpCDF   | 68   | 26 - 138 |
| 13C12-OCDF            | 60   | 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-228-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-228-SA5B-SS-0.0-0.5

LLI Sample # SW 6162926  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:12

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1805 SDG#: DX018-05

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

**Sample Description:** SL-228-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-228-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162926  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:12

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/11/2010 09:40

Suite 210

Reported: 01/11/2011 18:50

Chantilly VA 20151

X1805 SDG#: DX018-05

## 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      | 10357002     | 12/30/2010 03:14       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401A | 12/15/2010 09:13       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-229-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-229-SA5B-SS-0.0-0.5

LLI Sample # SW 6162927  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:40

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1806 SDG#: DX018-06

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 12.2       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-229-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-229-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162927  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:40

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1806 SDG#: DX018-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |     | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|-----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |     | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0294       | U   | 0.0294       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.06         | JB  | 0.0706       | 5.69         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.91         | JB  | 0.0720       | 5.69         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 3.90         | JB  | 0.0754       | 5.69         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 4.04         | JB  | 0.0757       | 5.69         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 122          | B   | 0.148        | 5.69         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,540        | B   | 0.169        | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0425       | U   | 0.0425       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.286        | JBQ | 0.0335       | 5.69         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.465        | JB  | 0.0306       | 5.69         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.05         | JB  | 0.0929       | 5.69         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.29         | JB  | 0.0869       | 5.69         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.274        | JBQ | 0.107        | 5.69         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.76         | JB  | 0.0892       | 5.69         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 16.5         | B   | 0.0798       | 5.69         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 3.12         | JB  | 0.107        | 5.69         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 39.5         | B   | 0.0608       | 11.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 61   | 25 - 164 |
| 13C12-12378-PeCDD     | 68   | 25 - 181 |
| 13C12-123478-HxCDD    | 67   | 32 - 141 |
| 13C12-123678-HxCDD    | 66   | 28 - 130 |
| 13C12-123789-HxCDD    | 66   | 28 - 130 |
| 13C12-1234678-HpCDD   | 64   | 23 - 140 |
| 13C12-OCDD            | 57   | 17 - 157 |
| 13C12-2378-TCDF       | 67   | 24 - 169 |
| 13C12-12378-PeCDF     | 68   | 24 - 185 |
| 13C12-23478-PeCDF     | 71   | 21 - 178 |
| 13C12-123478-HxCDF    | 70   | 26 - 152 |
| 13C12-123678-HxCDF    | 70   | 26 - 123 |
| 13C12-234678-HxCDF    | 69   | 28 - 136 |
| 13C12-123789-HxCDF    | 68   | 29 - 147 |
| 13C12-1234678-HpCDF   | 70   | 28 - 143 |
| 13C12-1234789-HpCDF   | 65   | 26 - 138 |
| 13C12-OCDF            | 56   | 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

**Sample Description:** SL-229-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-229-SA5B-SS-0.0-0.5

LLI Sample # SW 6162927  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:40

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1806 SDG#: DX018-06

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

**Sample Description:** SL-229-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-229-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162927  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/11/2010 09:40

Suite 210

Reported: 01/11/2011 18:50

Chantilly VA 20151

X1806 SDG#: DX018-06

## 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      | 10357002     | 12/30/2010 04:11       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401A | 12/15/2010 09:13       | William C Schwebel  | 1               |

**Sample Description:** SL-048-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA5B-SS-0.0-0.5

LLI Sample # SW 6162928  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:03

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1807 SDG#: DX018-07

| CAT<br>No.           | Analysis Name                 | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|-------------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                               |            |               |                                   |                                 |                    |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 11.3          | 0.50                              | 0.50                            | 1                  |

**Sample Description:** SL-048-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA5B-SS-0.0-0.5

LLI Sample # SW 6162928  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:03

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1807 SDG#: DX018-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0497 J     | 0.0191       | 1.13         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.221 JB     | 0.0342       | 5.64         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.218 JBQ    | 0.0411       | 5.64         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.670 JB     | 0.0423       | 5.64         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.573 JB     | 0.0406       | 5.64         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 30.7 B       | 0.0851       | 5.64         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 492 B        | 0.0685       | 11.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0618 JQ    | 0.0213       | 1.13         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.141 JBQ    | 0.0150       | 5.64         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.180 JB     | 0.0140       | 5.64         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.281 JB     | 0.0297       | 5.64         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.299 JB     | 0.0263       | 5.64         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.155 JBQ    | 0.0351       | 5.64         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.343 JBQ    | 0.0291       | 5.64         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.28 JB      | 0.0210       | 5.64         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.392 JB     | 0.0334       | 5.64         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 5.21 JB      | 0.0383       | 11.3         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 71   | 25 - 164 |
| 13C12-12378-PeCDD     | 77   | 25 - 181 |
| 13C12-123478-HxCDD    | 74   | 32 - 141 |
| 13C12-123678-HxCDD    | 74   | 28 - 130 |
| 13C12-123789-HxCDD    | 75   | 28 - 130 |
| 13C12-1234678-HpCDD   | 75   | 23 - 140 |
| 13C12-OCDD            | 70   | 17 - 157 |
| 13C12-2378-TCDF       | 73   | 24 - 169 |
| 13C12-12378-PeCDF     | 80   | 24 - 185 |
| 13C12-23478-PeCDF     | 77   | 21 - 178 |
| 13C12-123478-HxCDF    | 71   | 26 - 152 |
| 13C12-123678-HxCDF    | 76   | 26 - 123 |
| 13C12-234678-HxCDF    | 72   | 28 - 136 |
| 13C12-123789-HxCDF    | 68   | 29 - 147 |
| 13C12-1234678-HpCDF   | 86   | 28 - 143 |
| 13C12-1234789-HpCDF   | 68   | 26 - 138 |
| 13C12-OCDF            | 62   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 74   | 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-048-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA5B-SS-0.0-0.5

LLI Sample # SW 6162928  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:03

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1807 SDG#: DX018-07

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

**Sample Description:** SL-048-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162928  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:03

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1807 SDG#: DX018-07

## 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      | 10357002     | 12/30/2010 13:57       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401A | 12/15/2010 09:13       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-051-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA5B-SS-0.0-0.5

LLI Sample # SW 6162929  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:20

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1808 SDG#: DX018-08

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.9        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-051-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA5B-SS-0.0-0.5

LLI Sample # SW 6162929  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:20

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1808 SDG#: DX018-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0235 J     | 0.0183       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.163 JBQ    | 0.0421       | 5.55         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.249 JBQ    | 0.0372       | 5.55         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.09 JB      | 0.0385       | 5.55         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.463 JB     | 0.0396       | 5.55         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 38.4 B       | 0.0896       | 5.55         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 495 B        | 0.0761       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0294 JQ    | 0.0279       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.204 JB     | 0.0159       | 5.55         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.275 JB     | 0.0152       | 5.55         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.290 JB     | 0.0266       | 5.55         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.415 JB     | 0.0238       | 5.55         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.161 JB     | 0.0297       | 5.55         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.396 JBQ    | 0.0250       | 5.55         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 5.39 JB      | 0.0353       | 5.55         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.505 JB     | 0.0473       | 5.55         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 11.0 JB      | 0.0395       | 11.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 69   | 25 - 164 |
| 13C12-12378-PeCDD     | 76   | 25 - 181 |
| 13C12-123478-HxCDD    | 75   | 32 - 141 |
| 13C12-123678-HxCDD    | 74   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 75   | 23 - 140 |
| 13C12-OCDD            | 69   | 17 - 157 |
| 13C12-2378-TCDF       | 73   | 24 - 169 |
| 13C12-12378-PeCDF     | 81   | 24 - 185 |
| 13C12-23478-PeCDF     | 80   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 76   | 26 - 123 |
| 13C12-234678-HxCDF    | 74   | 28 - 136 |
| 13C12-123789-HxCDF    | 72   | 29 - 147 |
| 13C12-1234678-HpCDF   | 80   | 28 - 143 |
| 13C12-1234789-HpCDF   | 72   | 26 - 138 |
| 13C12-OCDF            | 64   | 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-051-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162929  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:20

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1808 SDG#: DX018-08

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

**Sample Description:** SL-051-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA5B-SS-0.0-0.5

LLI Sample # SW 6162929  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/11/2010 09:40

Suite 210

Reported: 01/11/2011 18:50

Chantilly VA 20151

X1808 SDG#: DX018-08

## 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      | 10357002     | 12/30/2010 14:54       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401A | 12/15/2010 09:13       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-062-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA5B-SS-0.0-0.5

LLI Sample # SW 6162930  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:00

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1809 SDG#: DX018-09

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 14.4       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-062-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA5B-SS-0.0-0.5

LLI Sample # SW 6162930  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:00

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1809 SDG#: DX018-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0263 U     | 0.0263       | 1.17         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0847 JBQ   | 0.0371       | 5.84         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0472 JBQ   | 0.0325       | 5.84         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.179 JB     | 0.0341       | 5.84         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.163 JBQ    | 0.0327       | 5.84         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.55 JB      | 0.0546       | 5.84         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 38.5 B       | 0.0536       | 11.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0411 J     | 0.0238       | 1.17         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0750 JBQ   | 0.0148       | 5.84         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0950 JB    | 0.0148       | 5.84         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0999 JBQ   | 0.0296       | 5.84         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.107 JBQ    | 0.0259       | 5.84         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.120 JBQ    | 0.0349       | 5.84         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.147 JBQ    | 0.0283       | 5.84         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.846 JB     | 0.0257       | 5.84         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.123 JBQ    | 0.0391       | 5.84         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.45 JB      | 0.0432       | 11.7         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 53   | 25 - 164 |
| 13C12-12378-PeCDD     | 61   | 25 - 181 |
| 13C12-123478-HxCDD    | 60   | 32 - 141 |
| 13C12-123678-HxCDD    | 60   | 28 - 130 |
| 13C12-123789-HxCDD    | 59   | 28 - 130 |
| 13C12-1234678-HpCDD   | 62   | 23 - 140 |
| 13C12-OCDD            | 58   | 17 - 157 |
| 13C12-2378-TCDF       | 58   | 24 - 169 |
| 13C12-12378-PeCDF     | 67   | 24 - 185 |
| 13C12-23478-PeCDF     | 64   | 21 - 178 |
| 13C12-123478-HxCDF    | 60   | 26 - 152 |
| 13C12-123678-HxCDF    | 65   | 26 - 123 |
| 13C12-234678-HxCDF    | 61   | 28 - 136 |
| 13C12-123789-HxCDF    | 56   | 29 - 147 |
| 13C12-1234678-HpCDF   | 72   | 28 - 143 |
| 13C12-1234789-HpCDF   | 59   | 26 - 138 |
| 13C12-OCDF            | 53   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 59   | 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-062-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162930  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:00

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1809 SDG#: DX018-09

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

**Sample Description:** SL-062-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA5B-SS-0.0-0.5

LLI Sample # SW 6162930  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/11/2010 09:40

Suite 210

Reported: 01/11/2011 18:50

Chantilly VA 20151

X1809 SDG#: DX018-09

## 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      | 10357002     | 12/30/2010 15:50       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401A | 12/15/2010 09:13       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-064-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-064-SA5B-SS-0.0-0.5

LLI Sample # SW 6162931  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:15

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1810 SDG#: DX018-10

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-064-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-064-SA5B-SS-0.0-0.5

LLI Sample # SW 6162931  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:15

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1810 SDG#: DX018-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0228 U     | 0.0228       | 1.12         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0736 JB    | 0.0335       | 5.60         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.135 JBQ    | 0.0376       | 5.60         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.642 JB     | 0.0395       | 5.60         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.354 JB     | 0.0373       | 5.60         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 20.8 B       | 0.0628       | 5.60         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 241 B        | 0.0651       | 11.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0398 JQ    | 0.0270       | 1.12         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.181 JBQ    | 0.0139       | 5.60         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.172 JB     | 0.0139       | 5.60         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.235 JBQ    | 0.0260       | 5.60         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.171 JB     | 0.0233       | 5.60         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.134 JBQ    | 0.0288       | 5.60         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.297 JB     | 0.0254       | 5.60         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.99 JB      | 0.0273       | 5.60         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.330 JBQ    | 0.0385       | 5.60         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 7.30 JB      | 0.0372       | 11.2         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 62   | 25 - 164 |
| 13C12-12378-PeCDD     | 73   | 25 - 181 |
| 13C12-123478-HxCDD    | 72   | 32 - 141 |
| 13C12-123678-HxCDD    | 71   | 28 - 130 |
| 13C12-123789-HxCDD    | 72   | 28 - 130 |
| 13C12-1234678-HpCDD   | 75   | 23 - 140 |
| 13C12-OCDD            | 70   | 17 - 157 |
| 13C12-2378-TCDF       | 69   | 24 - 169 |
| 13C12-12378-PeCDF     | 79   | 24 - 185 |
| 13C12-23478-PeCDF     | 76   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 78   | 26 - 123 |
| 13C12-234678-HxCDF    | 73   | 28 - 136 |
| 13C12-123789-HxCDF    | 74   | 29 - 147 |
| 13C12-1234678-HpCDF   | 83   | 28 - 143 |
| 13C12-1234789-HpCDF   | 73   | 26 - 138 |
| 13C12-OCDF            | 68   | 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-064-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-064-SA5B-SS-0.0-0.5

LLI Sample # SW 6162931  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:15

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1810 SDG#: DX018-10

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

**Sample Description:** SL-064-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-064-SA5B-SS-0.0-0.5

LLI Sample # SW 6162931  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:15

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1810 SDG#: DX018-10

---

### 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.

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### 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      | 10357002     | 12/30/2010 16:47       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401A | 12/15/2010 09:13       | William C Schwebel  | 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-232-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-232-SA5B-SS-0.0-0.5

LLI Sample # SW 6162932  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:59

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1811 SDG#: DX018-11

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 13.2       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-232-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-232-SA5B-SS-0.0-0.5

LLI Sample # SW 6162932  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:59

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1811 SDG#: DX018-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0306 U     | 0.0306       | 1.15         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.208 JB     | 0.0477       | 5.76         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.290 JB     | 0.0444       | 5.76         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.740 JB     | 0.0459       | 5.76         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.485 JB     | 0.0432       | 5.76         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 23.2 B       | 0.0762       | 5.76         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 248 B        | 0.0614       | 11.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0772 J     | 0.0387       | 1.15         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.147 JB     | 0.0203       | 5.76         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.464 JB     | 0.0218       | 5.76         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.249 JB     | 0.0343       | 5.76         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.235 JB     | 0.0295       | 5.76         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.119 JBQ    | 0.0347       | 5.76         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.333 JB     | 0.0310       | 5.76         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.25 JB      | 0.0371       | 5.76         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.356 JBQ    | 0.0533       | 5.76         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 6.53 JB      | 0.0435       | 11.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 63   | 25 - 164 |
| 13C12-12378-PeCDD     | 70   | 25 - 181 |
| 13C12-123478-HxCDD    | 65   | 32 - 141 |
| 13C12-123678-HxCDD    | 66   | 28 - 130 |
| 13C12-123789-HxCDD    | 70   | 28 - 130 |
| 13C12-1234678-HpCDD   | 71   | 23 - 140 |
| 13C12-OCDD            | 69   | 17 - 157 |
| 13C12-2378-TCDF       | 69   | 24 - 169 |
| 13C12-12378-PeCDF     | 82   | 24 - 185 |
| 13C12-23478-PeCDF     | 71   | 21 - 178 |
| 13C12-123478-HxCDF    | 65   | 26 - 152 |
| 13C12-123678-HxCDF    | 72   | 26 - 123 |
| 13C12-234678-HxCDF    | 67   | 28 - 136 |
| 13C12-123789-HxCDF    | 70   | 29 - 147 |
| 13C12-1234678-HpCDF   | 82   | 28 - 143 |
| 13C12-1234789-HpCDF   | 67   | 26 - 138 |
| 13C12-OCDF            | 62   | 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

**Sample Description:** SL-232-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-232-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162932  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 12:59

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/11/2011 18:50

X1811 SDG#: DX018-11

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

**Sample Description:** SL-232-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-232-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162932  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 12:59

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 12/11/2010 09:40

Suite 210

**Reported:** 01/11/2011 18:50

Chantilly VA 20151

X1811 SDG#: DX018-11

---

### 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      | 10357002     | 12/30/2010 17:43       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401A | 12/15/2010 09:13       | William C Schwebel  | 1               |

**Sample Description:** SL-233-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-233-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162933  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:46

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1812 SDG#: DX018-12

| CAT No.                                 | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b> |                               |            |            |                             |                           |                 |
| 11625                                   | 28a Moisture Content by 160.3 | n.a.       | 11.9       | 0.50                        | 0.50                      | 1               |

**Sample Description:** SL-233-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-233-SA5B-SS-0.0-0.5

LLI Sample # SW 6162933  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:46

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1812 SDG#: DX018-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0292 JQ    | 0.0198       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0704 JBQ   | 0.0294       | 5.68         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.113 JB     | 0.0285       | 5.68         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.458 JB     | 0.0300       | 5.68         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.242 JB     | 0.0295       | 5.68         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 13.7 B       | 0.0495       | 5.68         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 161 B        | 0.0456       | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0290 JQ    | 0.0243       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.152 JBQ    | 0.0123       | 5.68         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.183 JBQ    | 0.0132       | 5.68         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.165 JB     | 0.0204       | 5.68         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.162 JB     | 0.0174       | 5.68         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.135 JB     | 0.0246       | 5.68         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.233 JB     | 0.0195       | 5.68         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.07 JB      | 0.0210       | 5.68         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.368 JB     | 0.0341       | 5.68         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.71 JB      | 0.0341       | 11.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 69   | 25 - 164 |
| 13C12-12378-PeCDD     | 80   | 25 - 181 |
| 13C12-123478-HxCDD    | 76   | 32 - 141 |
| 13C12-123678-HxCDD    | 76   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 79   | 23 - 140 |
| 13C12-OCDD            | 74   | 17 - 157 |
| 13C12-2378-TCDF       | 73   | 24 - 169 |
| 13C12-12378-PeCDF     | 90   | 24 - 185 |
| 13C12-23478-PeCDF     | 82   | 21 - 178 |
| 13C12-123478-HxCDF    | 75   | 26 - 152 |
| 13C12-123678-HxCDF    | 84   | 26 - 123 |
| 13C12-234678-HxCDF    | 75   | 28 - 136 |
| 13C12-123789-HxCDF    | 70   | 29 - 147 |
| 13C12-1234678-HpCDF   | 95   | 28 - 143 |
| 13C12-1234789-HpCDF   | 70   | 26 - 138 |
| 13C12-OCDF            | 64   | 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-233-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-233-SA5B-SS-0.0-0.5

LLI Sample # SW 6162933  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:46

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1812 SDG#: DX018-12

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

**Sample Description:** SL-233-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-233-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162933  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 12:46

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/11/2011 18:50

X1812 SDG#: DX018-12

## 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      | 10357002     | 12/30/2010 18:40       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401A | 12/15/2010 09:13       | William C Schwebel  | 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-299-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-299-SA5B-SS-0.0-0.5

LLI Sample # SW 6162934  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 10:49

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1813 SDG#: DX018-13

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-299-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-299-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162934  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 10:49

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1813 SDG#: DX018-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0330 U     | 0.0330       | 1.16         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0696 JBQ   | 0.0392       | 5.79         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0567 JBQ   | 0.0362       | 5.79         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.250 JB     | 0.0373       | 5.79         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.141 JBQ    | 0.0370       | 5.79         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6.90 B       | 0.0601       | 5.79         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 83.1 B       | 0.0501       | 11.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0339 JQ    | 0.0260       | 1.16         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.114 JBQ    | 0.0152       | 5.79         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.128 JBQ    | 0.0149       | 5.79         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.132 JBQ    | 0.0261       | 5.79         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0951 JBQ   | 0.0225       | 5.79         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.112 JBQ    | 0.0290       | 5.79         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.169 JBQ    | 0.0255       | 5.79         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.25 JB      | 0.0242       | 5.79         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.172 JBQ    | 0.0372       | 5.79         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.23 JB      | 0.0375       | 11.6         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 65   | 25 - 164 |
| 13C12-12378-PeCDD     | 76   | 25 - 181 |
| 13C12-123478-HxCDD    | 73   | 32 - 141 |
| 13C12-123678-HxCDD    | 71   | 28 - 130 |
| 13C12-123789-HxCDD    | 71   | 28 - 130 |
| 13C12-1234678-HpCDD   | 75   | 23 - 140 |
| 13C12-OCDD            | 72   | 17 - 157 |
| 13C12-2378-TCDF       | 69   | 24 - 169 |
| 13C12-12378-PeCDF     | 84   | 24 - 185 |
| 13C12-23478-PeCDF     | 79   | 21 - 178 |
| 13C12-123478-HxCDF    | 73   | 26 - 152 |
| 13C12-123678-HxCDF    | 80   | 26 - 123 |
| 13C12-234678-HxCDF    | 74   | 28 - 136 |
| 13C12-123789-HxCDF    | 73   | 29 - 147 |
| 13C12-1234678-HpCDF   | 89   | 28 - 143 |
| 13C12-1234789-HpCDF   | 72   | 26 - 138 |
| 13C12-OCDF            | 65   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 72   | 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-299-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-299-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162934  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 10:49

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1813 SDG#: DX018-13

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



# Analysis Report

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**Sample Description:** SL-299-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-299-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162934  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 10:49

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/11/2011 18:50

X1813 SDG#: DX018-13

## 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      | 10357002     | 12/30/2010 19:36       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401B | 12/15/2010 09:13       | William C Schwebel  | 1               |

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



# Analysis Report

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

Page 1 of 4

**Sample Description:** SL-300-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-300-SA5B-SS-0.0-0.5

LLI Sample # SW 6162935  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:04

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1814 SDG#: DX018-14

| CAT<br>No.           | Analysis Name                 | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|-------------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                               |            |               |                                   |                                 |                    |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 17.1          | 0.50                              | 0.50                            | 1                  |

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

**Sample Description:** SL-300-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-300-SA5B-SS-0.0-0.5

LLI Sample # SW 6162935  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:04

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1814 SDG#: DX018-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0211 JQ    | 0.0204       | 1.21         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0493 U     | 0.0493       | 6.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0452 U     | 0.0452       | 6.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.222 JB     | 0.0485       | 6.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.155 JB     | 0.0460       | 6.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 8.82 B       | 0.0889       | 6.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 110 B        | 0.0805       | 12.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0409 JQ    | 0.0300       | 1.21         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0791 JBQ   | 0.0210       | 6.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.221 JBQ    | 0.0212       | 6.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.175 JBQ    | 0.0369       | 6.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.117 JBQ    | 0.0315       | 6.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.120 JB     | 0.0331       | 6.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.201 JB     | 0.0332       | 6.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.30 JB      | 0.0346       | 6.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.203 JBQ    | 0.0597       | 6.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.83 JB      | 0.0758       | 12.1         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 68   | 25 - 164 |
| 13C12-12378-PeCDD     | 43   | 25 - 181 |
| 13C12-123478-HxCDD    | 42   | 32 - 141 |
| 13C12-123678-HxCDD    | 41   | 28 - 130 |
| 13C12-123789-HxCDD    | 43   | 28 - 130 |
| 13C12-1234678-HpCDD   | 40   | 23 - 140 |
| 13C12-OCDD            | 38   | 17 - 157 |
| 13C12-2378-TCDF       | 54   | 24 - 169 |
| 13C12-12378-PeCDF     | 50   | 24 - 185 |
| 13C12-23478-PeCDF     | 48   | 21 - 178 |
| 13C12-123478-HxCDF    | 40   | 26 - 152 |
| 13C12-123678-HxCDF    | 45   | 26 - 123 |
| 13C12-234678-HxCDF    | 43   | 28 - 136 |
| 13C12-123789-HxCDF    | 50   | 29 - 147 |
| 13C12-1234678-HpCDF   | 46   | 28 - 143 |
| 13C12-1234789-HpCDF   | 33   | 26 - 138 |
| 13C12-OCDF            | 29   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 43   | 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-300-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-300-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162935  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:04

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1814 SDG#: DX018-14

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

**Sample Description:** SL-300-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-300-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162935  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 11:04

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 12/11/2010 09:40

Suite 210

**Reported:** 01/11/2011 18:50

Chantilly VA 20151

X1814 SDG#: DX018-14

## 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      | 10357002     | 12/30/2010 20:33       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401B | 12/15/2010 09:13       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-067-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA5B-SS-0.0-0.5

LLI Sample # SW 6162936  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:55

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1815 SDG#: DX018-15

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-067-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA5B-SS-0.0-0.5

LLI Sample # SW 6162936  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:55

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1815 SDG#: DX018-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.116        | JQ           | 0.0303       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.63         | JBQ          | 0.0872       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 2.12         | JB           | 0.0512       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 7.17         | B            | 0.0525       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 3.76         | JB           | 0.0528       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 152          | B            | 0.171        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,980        | B            | 0.144        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 1.24         |              | 0.0879       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.898        | JB           | 0.0347       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.63         | JB           | 0.0320       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.67         | JB           | 0.0538       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 2.45         | JB           | 0.0505       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.784        | JBQ          | 0.0579       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 2.23         | JB           | 0.0489       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 25.9         | B            | 0.0439       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 4.10         | JB           | 0.0542       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 51.3         | B            | 0.0458       | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 58   | 25 - 164 |
| 13C12-12378-PeCDD     | 65   | 25 - 181 |
| 13C12-123478-HxCDD    | 63   | 32 - 141 |
| 13C12-123678-HxCDD    | 63   | 28 - 130 |
| 13C12-123789-HxCDD    | 63   | 28 - 130 |
| 13C12-1234678-HpCDD   | 63   | 23 - 140 |
| 13C12-OCDD            | 56   | 17 - 157 |
| 13C12-2378-TCDF       | 64   | 24 - 169 |
| 13C12-12378-PeCDF     | 69   | 24 - 185 |
| 13C12-23478-PeCDF     | 71   | 21 - 178 |
| 13C12-123478-HxCDF    | 67   | 26 - 152 |
| 13C12-123678-HxCDF    | 67   | 26 - 123 |
| 13C12-234678-HxCDF    | 67   | 28 - 136 |
| 13C12-123789-HxCDF    | 67   | 29 - 147 |
| 13C12-1234678-HpCDF   | 67   | 28 - 143 |
| 13C12-1234789-HpCDF   | 67   | 26 - 138 |
| 13C12-OCDF            | 60   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 63   | 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-067-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA5B-SS-0.0-0.5

LLI Sample # SW 6162936  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:55

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1815 SDG#: DX018-15

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

**Sample Description:** SL-067-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA5B-SS-0.0-0.5

LLI Sample # SW 6162936  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/11/2010 09:40

Suite 210

Reported: 01/11/2011 18:50

Chantilly VA 20151

X1815 SDG#: DX018-15

## 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      | 10357002     | 12/30/2010 21:30       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401B | 12/15/2010 09:13       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-059-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA5B-SS-0.0-0.5

LLI Sample # SW 6162937  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:24

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1816 SDG#: DX018-16

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-059-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA5B-SS-0.0-0.5

LLI Sample # SW 6162937  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:24

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1816 SDG#: DX018-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0183 U     | 0.0183       | 1.15         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0965 JBQ   | 0.0256       | 5.74         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0561 JBQ   | 0.0216       | 5.74         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.163 JBQ    | 0.0217       | 5.74         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.110 JBQ    | 0.0219       | 5.74         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 4.75 JB      | 0.0326       | 5.74         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 55.8 B       | 0.0371       | 11.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0307 JQ    | 0.0176       | 1.15         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.114 JB     | 0.00976      | 5.74         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.134 JB     | 0.00999      | 5.74         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.137 JB     | 0.0186       | 5.74         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0956 JBQ   | 0.0160       | 5.74         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0862 JBQ   | 0.0227       | 5.74         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.159 JB     | 0.0171       | 5.74         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.948 JB     | 0.0146       | 5.74         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.116 JB     | 0.0241       | 5.74         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.75 JB      | 0.0247       | 11.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 69   | 25 - 164 |
| 13C12-12378-PeCDD     | 83   | 25 - 181 |
| 13C12-123478-HxCDD    | 79   | 32 - 141 |
| 13C12-123678-HxCDD    | 80   | 28 - 130 |
| 13C12-123789-HxCDD    | 79   | 28 - 130 |
| 13C12-1234678-HpCDD   | 82   | 23 - 140 |
| 13C12-OCDD            | 77   | 17 - 157 |
| 13C12-2378-TCDF       | 70   | 24 - 169 |
| 13C12-12378-PeCDF     | 92   | 24 - 185 |
| 13C12-23478-PeCDF     | 84   | 21 - 178 |
| 13C12-123478-HxCDF    | 76   | 26 - 152 |
| 13C12-123678-HxCDF    | 85   | 26 - 123 |
| 13C12-234678-HxCDF    | 77   | 28 - 136 |
| 13C12-123789-HxCDF    | 68   | 29 - 147 |
| 13C12-1234678-HpCDF   | 100  | 28 - 143 |
| 13C12-1234789-HpCDF   | 71   | 26 - 138 |
| 13C12-OCDF            | 65   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 74   | 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-059-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162937  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:24

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1816 SDG#: DX018-16

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

**Sample Description:** SL-059-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA5B-SS-0.0-0.5

LLI Sample # SW 6162937  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:24

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/11/2010 09:40

Suite 210

Reported: 01/11/2011 18:50

Chantilly VA 20151

X1816 SDG#: DX018-16

## 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      | 10357002     | 12/31/2010 07:08       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401B | 12/15/2010 09:13       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-065-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-065-SA5B-SS-0.0-0.5

LLI Sample # SW 6162938  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:25

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1817 SDG#: DX018-17

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-065-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-065-SA5B-SS-0.0-0.5

LLI Sample # SW 6162938  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:25

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1817 SDG#: DX018-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0224 J     | 0.0189       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.163 JB     | 0.0358       | 5.52         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.168 JB     | 0.0268       | 5.52         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.05 JB      | 0.0276       | 5.52         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.538 JB     | 0.0272       | 5.52         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 10.3 B       | 0.0377       | 5.52         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 90.5 B       | 0.0446       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.162 J      | 0.0536       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.450 JBQ    | 0.0231       | 5.52         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.28 JB      | 0.0223       | 5.52         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.02 JB      | 0.0223       | 5.52         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.639 JB     | 0.0202       | 5.52         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.354 JB     | 0.0238       | 5.52         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.549 JB     | 0.0208       | 5.52         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.04 JB      | 0.0178       | 5.52         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.561 JBQ    | 0.0221       | 5.52         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.34 JB      | 0.0233       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 72   | 25 - 164 |
| 13C12-12378-PeCDD     | 84   | 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       | 76   | 24 - 169 |
| 13C12-12378-PeCDF     | 89   | 24 - 185 |
| 13C12-23478-PeCDF     | 88   | 21 - 178 |
| 13C12-123478-HxCDF    | 81   | 26 - 152 |
| 13C12-123678-HxCDF    | 85   | 26 - 123 |
| 13C12-234678-HxCDF    | 82   | 28 - 136 |
| 13C12-123789-HxCDF    | 82   | 29 - 147 |
| 13C12-1234678-HpCDF   | 89   | 28 - 143 |
| 13C12-1234789-HpCDF   | 83   | 26 - 138 |
| 13C12-OCDF            | 75   | 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-065-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-065-SA5B-SS-0.0-0.5

LLI Sample # SW 6162938  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:25

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1817 SDG#: DX018-17

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

**Sample Description:** SL-065-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-065-SA5B-SS-0.0-0.5

LLI Sample # SW 6162938  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/11/2010 09:40

Suite 210

Reported: 01/11/2011 18:50

Chantilly VA 20151

X1817 SDG#: DX018-17

## 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      | 10357002     | 12/31/2010 08:05       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401B | 12/15/2010 09:13       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-061-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA5B-SS-0.0-0.5

LLI Sample # SW 6162939  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:45

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1818 SDG#: DX018-18

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 12.7       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-061-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162939  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 13:45

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/11/2011 18:50

X1818 SDG#: DX018-18

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0207 U     | 0.0207       | 1.15         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0989 JBQ   | 0.0414       | 5.73         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0999 JBQ   | 0.0296       | 5.73         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.522 JB     | 0.0293       | 5.73         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.279 JB     | 0.0300       | 5.73         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 17.8 B       | 0.0533       | 5.73         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 231 B        | 0.0448       | 11.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0411 JQ    | 0.0274       | 1.15         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.143 JBQ    | 0.0143       | 5.73         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.164 JB     | 0.0137       | 5.73         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.182 JB     | 0.0207       | 5.73         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.173 JBQ    | 0.0183       | 5.73         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.132 JBQ    | 0.0231       | 5.73         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.239 JB     | 0.0203       | 5.73         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.36 JB      | 0.0274       | 5.73         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.249 JBQ    | 0.0408       | 5.73         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 6.33 JB      | 0.0251       | 11.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 67   | 25 - 164 |
| 13C12-12378-PeCDD     | 83   | 25 - 181 |
| 13C12-123478-HxCDD    | 79   | 32 - 141 |
| 13C12-123678-HxCDD    | 79   | 28 - 130 |
| 13C12-123789-HxCDD    | 77   | 28 - 130 |
| 13C12-1234678-HpCDD   | 80   | 23 - 140 |
| 13C12-OCDD            | 75   | 17 - 157 |
| 13C12-2378-TCDF       | 74   | 24 - 169 |
| 13C12-12378-PeCDF     | 89   | 24 - 185 |
| 13C12-23478-PeCDF     | 88   | 21 - 178 |
| 13C12-123478-HxCDF    | 81   | 26 - 152 |
| 13C12-123678-HxCDF    | 86   | 26 - 123 |
| 13C12-234678-HxCDF    | 80   | 28 - 136 |
| 13C12-123789-HxCDF    | 79   | 29 - 147 |
| 13C12-1234678-HpCDF   | 92   | 28 - 143 |
| 13C12-1234789-HpCDF   | 79   | 26 - 138 |
| 13C12-OCDF            | 70   | 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-061-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA5B-SS-0.0-0.5

LLI Sample # SW 6162939  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:45

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1818 SDG#: DX018-18

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

**Sample Description:** SL-061-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA5B-SS-0.0-0.5

LLI Sample # SW 6162939  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:45

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1818 SDG#: DX018-18

## 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      | 10357002     | 12/31/2010 09:01       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401B | 12/15/2010 09:13       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-070-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5B-SS-0.0-0.5

LLI Sample # SW 6162940  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:34

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1819 SDG#: DX018-19\*

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 15.1       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-070-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5B-SS-0.0-0.5

LLI Sample # SW 6162940  
LLI Group # 1225038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:34

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1819 SDG#: DX018-19\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0425 J     | 0.0186       | 1.18         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.189 JBQ    | 0.0366       | 5.89         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.270 JB     | 0.0261       | 5.89         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.985 JB     | 0.0269       | 5.89         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.625 JBQ    | 0.0264       | 5.89         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 22.9 B       | 0.0473       | 5.89         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 273 B        | 0.0438       | 11.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0689 JQ    | 0.0389       | 1.18         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.214 JBQ    | 0.0181       | 5.89         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.460 JB     | 0.0166       | 5.89         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.567 JBQ    | 0.0211       | 5.89         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.415 JB     | 0.0197       | 5.89         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.248 JBQ    | 0.0223       | 5.89         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.402 JB     | 0.0200       | 5.89         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.82 JB      | 0.0163       | 5.89         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.450 JB     | 0.0206       | 5.89         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 6.75 JB      | 0.0218       | 11.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 73   | 25 - 164 |
| 13C12-12378-PeCDD     | 85   | 25 - 181 |
| 13C12-123478-HxCDD    | 83   | 32 - 141 |
| 13C12-123678-HxCDD    | 83   | 28 - 130 |
| 13C12-123789-HxCDD    | 82   | 28 - 130 |
| 13C12-1234678-HpCDD   | 85   | 23 - 140 |
| 13C12-OCDD            | 81   | 17 - 157 |
| 13C12-2378-TCDF       | 81   | 24 - 169 |
| 13C12-12378-PeCDF     | 91   | 24 - 185 |
| 13C12-23478-PeCDF     | 93   | 21 - 178 |
| 13C12-123478-HxCDF    | 85   | 26 - 152 |
| 13C12-123678-HxCDF    | 87   | 26 - 123 |
| 13C12-234678-HxCDF    | 85   | 28 - 136 |
| 13C12-123789-HxCDF    | 89   | 29 - 147 |
| 13C12-1234678-HpCDF   | 90   | 28 - 143 |
| 13C12-1234789-HpCDF   | 88   | 26 - 138 |
| 13C12-OCDF            | 83   | 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-070-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162940  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 13:34

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

Submitted: 12/11/2010 09:40

Reported: 01/11/2011 18:50

X1819 SDG#: DX018-19\*

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

**Sample Description:** SL-070-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162940  
**LLI Group #** 1225038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 13:34

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 12/11/2010 09:40

Suite 210

**Reported:** 01/11/2011 18:50

Chantilly VA 20151

X1819 SDG#: DX018-19\*

## 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      | 10357002     | 12/31/2010 09:58       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10357002     | 12/23/2010 13:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162401B | 12/15/2010 09:13       | William C Schwebel  | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 01/11/11 at 06:50 PM

Group Number: 1225038

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: 10349162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6162924-6162933 |             |           |              | 100      |           | 80-120          |     |         |
| Batch number: 10349162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6162934-6162940 |             |           |              | 100      |           | 80-120          |     |         |
| Batch number: 10357162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6162922-6162923 |             |           |              | 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: 10357002 | Sample number(s): 6162922-6162940 |             |           |              |          |           |                 |     |         |
| 2378-TCDD              | 0.0276 U                          | 0.0276      | 1.00      | ng/kg        | 98       |           | 67-158          |     |         |
| 12378-PeCDD            | 0.0565 J                          | 0.0332      | 5.00      | ng/kg        | 112      |           | 70-142          |     |         |
| 123478-HxCDD           | 0.0392 J                          | 0.0263      | 5.00      | ng/kg        | 99       |           | 70-164          |     |         |
| 123678-HxCDD           | 0.0962 J                          | 0.0268      | 5.00      | ng/kg        | 98       |           | 76-134          |     |         |
| 123789-HxCDD           | 0.0393 J                          | 0.0266      | 5.00      | ng/kg        | 101      |           | 64-162          |     |         |
| 1234678-HpCDD          | 0.225 J                           | 0.0420      | 5.00      | ng/kg        | 99       |           | 70-140          |     |         |
| OCDD                   | 0.461 J                           | 0.0439      | 10.0      | ng/kg        | 98       |           | 78-144          |     |         |
| 2378-TCDF              | 0.0241 U                          | 0.0241      | 1.00      | ng/kg        | 102      |           | 75-158          |     |         |
| 12378-PeCDF            | 0.0326 J                          | 0.0151      | 5.00      | ng/kg        | 102      |           | 80-134          |     |         |
| 23478-PeCDF            | 0.148 J                           | 0.0153      | 5.00      | ng/kg        | 101      |           | 68-160          |     |         |
| 123478-HxCDF           | 0.100 J                           | 0.0257      | 5.00      | ng/kg        | 99       |           | 72-134          |     |         |
| 123678-HxCDF           | 0.0790 J                          | 0.0211      | 5.00      | ng/kg        | 96       |           | 84-130          |     |         |
| 123789-HxCDF           | 0.137 J                           | 0.0313      | 5.00      | ng/kg        | 97       |           | 78-130          |     |         |
| 234678-HxCDF           | 0.197 J                           | 0.0249      | 5.00      | ng/kg        | 99       |           | 70-156          |     |         |
| 1234678-HpCDF          | 0.483 J                           | 0.0189      | 5.00      | ng/kg        | 97       |           | 82-122          |     |         |
| 1234789-HpCDF          | 0.172 J                           | 0.0332      | 5.00      | ng/kg        | 98       |           | 78-138          |     |         |
| OCDF                   | 0.458 J                           | 0.0512      | 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: 10349162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6162924-6162933 |          |               |     |         | BKG: P154843<br>20.4 | 27.1     | 28*     | 20          |
| Batch number: 10349162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6162934-6162940 |          |               |     |         | BKG: P162915<br>13.7 | 13.5     | 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: 01/11/11 at 06:50 PM

Group Number: 1225038

### 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<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc        | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-------------------------------------------------------------|------------|-------------|------------------|-----|------------|--------------------|-------------|------------|----------------|
| Batch number: 10357162401A<br>28a Moisture Content by 160.3 |            |             |                  |     |            |                    |             |            |                |
| Sample number(s): 6162922-6162923                           |            |             |                  |     |            | BKG: P162818<br>10 | 10.2        | 2          | 20             |

### Surrogate Quality Control

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

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

Batch number: 10357002

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF       | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------------|--------------------|--------------------|
| 6162922 | 59                  | 75                  | 72                 | 76                       | 73                 | 68                 |
| 6162923 | 41                  | 52                  | 50                 | 53                       | 50                 | 47                 |
| 6162924 | 67                  | 80                  | 78                 | 74                       | 78                 | 75                 |
| 6162925 | 67                  | 82                  | 75                 | 77                       | 75                 | 73                 |
| 6162926 | 64                  | 75                  | 74                 | 76                       | 70                 | 66                 |
| 6162927 | 61                  | 71                  | 70                 | 70                       | 69                 | 68                 |
| 6162928 | 71                  | 77                  | 71                 | 76                       | 72                 | 68                 |
| 6162929 | 69                  | 80                  | 74                 | 76                       | 74                 | 72                 |
| 6162930 | 53                  | 64                  | 60                 | 65                       | 61                 | 56                 |
| 6162931 | 62                  | 76                  | 74                 | 78                       | 73                 | 74                 |
| 6162932 | 63                  | 71                  | 65                 | 72                       | 67                 | 70                 |
| 6162933 | 69                  | 82                  | 75                 | 84                       | 75                 | 70                 |
| 6162934 | 65                  | 79                  | 73                 | 80                       | 74                 | 73                 |
| 6162935 | 68                  | 48                  | 40                 | 45                       | 43                 | 50                 |
| 6162936 | 58                  | 71                  | 67                 | 67                       | 67                 | 67                 |
| 6162937 | 69                  | 84                  | 76                 | 85                       | 77                 | 68                 |
| 6162938 | 72                  | 88                  | 81                 | 85                       | 82                 | 82                 |
| 6162939 | 67                  | 88                  | 81                 | 86                       | 80                 | 79                 |
| 6162940 | 73                  | 93                  | 85                 | 87                       | 85                 | 89                 |
| Blank   | 59                  | 69                  | 68                 | 79                       | 69                 | 60                 |
| OPR     | 56                  | 68                  | 67                 | 70                       | 68                 | 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<br>(CRS) | 13C12-12378-PeCDD  | 13C12-123478-HxCDD |
| 6162922 | 81                  | 67                  | 59                 | 68                       | 70                 | 70                 |
| 6162923 | 55                  | 45                  | 38                 | 47                       | 49                 | 47                 |
| 6162924 | 87                  | 78                  | 76                 | 75                       | 77                 | 75                 |
| 6162925 | 80                  | 74                  | 69                 | 72                       | 76                 | 74                 |
| 6162926 | 80                  | 68                  | 60                 | 71                       | 72                 | 70                 |
| 6162927 | 70                  | 65                  | 56                 | 66                       | 68                 | 67                 |
| 6162928 | 86                  | 68                  | 62                 | 74                       | 77                 | 74                 |
| 6162929 | 80                  | 72                  | 64                 | 75                       | 76                 | 75                 |
| 6162930 | 72                  | 59                  | 53                 | 59                       | 61                 | 60                 |
| 6162931 | 83                  | 73                  | 68                 | 69                       | 73                 | 72                 |

\*- 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: 01/11/11 at 06:50 PM

Group Number: 1225038

### Surrogate Quality Control

|         |                    |                    |                     |            |                 |                   |
|---------|--------------------|--------------------|---------------------|------------|-----------------|-------------------|
| 6162932 | 82                 | 67                 | 62                  | 66         | 70              | 65                |
| 6162933 | 95                 | 70                 | 64                  | 77         | 80              | 76                |
| 6162934 | 89                 | 72                 | 65                  | 72         | 76              | 73                |
| 6162935 | 46                 | 33                 | 29                  | 43         | 43              | 42                |
| 6162936 | 67                 | 67                 | 60                  | 63         | 65              | 63                |
| 6162937 | 100                | 71                 | 65                  | 74         | 83              | 79                |
| 6162938 | 89                 | 83                 | 75                  | 76         | 84              | 79                |
| 6162939 | 92                 | 79                 | 70                  | 75         | 83              | 79                |
| 6162940 | 90                 | 88                 | 83                  | 77         | 85              | 83                |
| Blank   | 90                 | 62                 | 57                  | 64         | 69              | 72                |
| OPR     | 71                 | 72                 | 64                  | 54         | 56              | 64                |
| 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 |
| 6162922 | 70                 | 69                 | 69                  | 61         | 62              | 75                |
| 6162923 | 48                 | 48                 | 45                  | 40         | 44              | 53                |
| 6162924 | 74                 | 74                 | 79                  | 76         | 73              | 73                |
| 6162925 | 73                 | 72                 | 75                  | 73         | 72              | 81                |
| 6162926 | 70                 | 68                 | 68                  | 62         | 68              | 75                |
| 6162927 | 66                 | 66                 | 64                  | 57         | 67              | 68                |
| 6162928 | 74                 | 75                 | 75                  | 70         | 73              | 80                |
| 6162929 | 74                 | 74                 | 75                  | 69         | 73              | 81                |
| 6162930 | 60                 | 59                 | 62                  | 58         | 58              | 67                |
| 6162931 | 71                 | 72                 | 75                  | 70         | 69              | 79                |
| 6162932 | 66                 | 70                 | 71                  | 69         | 69              | 82                |
| 6162933 | 76                 | 74                 | 79                  | 74         | 73              | 90                |
| 6162934 | 71                 | 71                 | 75                  | 72         | 69              | 84                |
| 6162935 | 41                 | 43                 | 40                  | 38         | 54              | 50                |
| 6162936 | 63                 | 63                 | 63                  | 56         | 64              | 69                |
| 6162937 | 80                 | 79                 | 82                  | 77         | 70              | 92                |
| 6162938 | 79                 | 79                 | 82                  | 76         | 76              | 89                |
| 6162939 | 79                 | 77                 | 80                  | 75         | 74              | 89                |
| 6162940 | 83                 | 82                 | 85                  | 81         | 81              | 91                |
| Blank   | 71                 | 70                 | 70                  | 67         | 60              | 76                |
| OPR     | 64                 | 65                 | 66                  | 66         | 62              | 70                |
| 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.

acct#13013      Cp#1225038

Ap# 1225038

Sample# 6162922-40

## CHAIN OF CUSTODY RECORD

[illegible]

PB  
12/10/10

P6  
12/10/10

Other Instructions and Notes:

Amended  
COC

The collection date for  
SL-017-3A5C-SB-4.0-5.0  
and SL-017-3A5C-SB-9.0-10.0  
was updated to 12/9/10  
per PB.

NLM 115/1

sample # 6162922-46

### CHAIN OF CUSTODY RECORD

| CDM SSSL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                        |                            |                                                            |                              |      |                           | LIST OF CONTAMINANTS |                         |                                 |                   |                        |                                 |                        |                     |                |                         |                        |                                      |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------------------------------------------|------------------------------|------|---------------------------|----------------------|-------------------------|---------------------------------|-------------------|------------------------|---------------------------------|------------------------|---------------------|----------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|---------------------|---------------------------------------------|--------------------|-------------|-------------------|----------------|------------------------|---------------------|----------------------|------------------------------|
| <b>NOTES:</b><br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |                            |                                                            |                              |      |                           | VOCs/EPA 8260B       | 1,4-Dioxane EPA 8260BIM | SVOCs EPA 8270C & PAHs 8270 SIM | TPH-GRO EPA 8015B | TPH-LEH EPA 8015B Mod. | *Mercury EPA 6010/6020B&I/7471A | **Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 8850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A                    | **n-NDMA EPA 1631C | **EPA 8330A | **Oxide EPA 9012B | **pH EPA 9045C | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | Other Instructions and Notes |
|                                                                                                                                                                                  |                            |                                                            |                              |      |                           | SAMPLE NUMBER        | DATE                    | TIME                            | MATRIX            | Preservative           | Type & No. of Containers        |                        |                     | X              |                         | X                      | X                                    | X                                         | X                                        | X                   | X                                           | X                  |             |                   |                |                        |                     |                      |                              |
| SL-051-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1320                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-052-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1300                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-064-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1315                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-232-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1259                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-233-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1246                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-299-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1049                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-300-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1104                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-067-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1355                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-059-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1424                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-065-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1425                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-061-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1345                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| SL-070-SASB-SS-0.0-0.5                                                                                                                                                           | 12.10.10                   | 1334                                                       | soil                         | none | 1 x 16 oz. jar & 1 sleeve |                      |                         | X                               |                   | X                      | X                               | X                      | X                   | X              | X                       | X                      | X                                    |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
|                                                                                                                                                                                  |                            |                                                            |                              |      |                           |                      |                         |                                 |                   |                        |                                 |                        |                     |                |                         |                        |                                      |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
|                                                                                                                                                                                  |                            |                                                            |                              |      |                           |                      |                         |                                 |                   |                        |                                 |                        |                     |                |                         |                        |                                      |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
|                                                                                                                                                                                  |                            |                                                            |                              |      |                           |                      |                         |                                 |                   |                        |                                 |                        |                     |                |                         |                        |                                      |                                           |                                          |                     |                                             |                    |             |                   |                |                        |                     |                      |                              |
| Received by: (Signature)<br><i>[Signature]</i>                                                                                                                                   | Date/Time<br>12.10.10 1630 | Received for Laboratory: (Signature)<br><i>[Signature]</i> | Date/Time<br>relided 0910    |      |                           |                      |                         |                                 |                   |                        |                                 |                        |                     |                |                         |                        |                                      |                                           |                                          |                     | Laboratory:<br>Lancaster Laboratories, Inc. |                    |             |                   |                |                        |                     |                      |                              |
| Received by: (Signature)                                                                                                                                                         | Date/Time                  | Airbill No.<br>00737997                                    | Trucking Number 869514317145 |      |                           |                      |                         |                                 |                   |                        |                                 |                        |                     |                |                         |                        |                                      |                                           |                                          |                     | Cooler 4                                    |                    |             |                   |                |                        |                     |                      |                              |

869534317145

acc#13013

Cp#1225038

sample# 6162922-40

## CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                       |          |      |        |              |                             | CHAIN OF CUSTODY RECORD                                                             |                        |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          |                              |                       |                     |                | Other Instructions and Notes |                     |                      |   |                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|--------------|-----------------------------|-------------------------------------------------------------------------------------|------------------------|------------------------------------|-------------------|------------------------|------------------------------|-----------------------|--------------------|----------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|---------------------|--------------------------|------------------------------|-----------------------|---------------------|----------------|------------------------------|---------------------|----------------------|---|----------------------------------------------------|
| NOTES:                                                                                                                                                          |          |      |        |              |                             |                                                                                     |                        |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          |                              |                       |                     |                |                              |                     |                      |   |                                                    |
| *Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |          |      |        |              |                             |                                                                                     |                        |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          |                              |                       |                     |                |                              |                     |                      |   |                                                    |
| Samplers: (Signature) <i>Randall Thornton</i>                                                                                                                   |          |      |        |              |                             |                                                                                     |                        |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          |                              |                       |                     |                |                              |                     |                      |   |                                                    |
| SAMPLE NUMBER                                                                                                                                                   | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers    | VOCs EPA 8160a                                                                      | 1,4-Dioxane EPA 8260SM | SVOCs EPA 8270C & PAHs EPA 8270 SM | TPH-GRO EPA 8015B | TPH-EPH EPA 8015B Mod. | *Metals EPA 6010/6020B/7471A | *Hex Chrome EPA 7195* | *Mercury EPA 300.0 | *PCBs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 8850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrate EPA 300.0 | **Formaldehyde EPA 8314A | **n-NDMA EPA 1675C           | **Emergents EPA 8330A | **Cyanide EPA 9012B | **pH EPA 9045C | **Terphenyls EPA 8015B       | **Glycols EPA 8015B | **Alcohols EPA 8015B |   |                                                    |
| SL-005-SASC-SB-4.0-5.0                                                                                                                                          | 12.10.10 | 1529 | soil   | none         | 3 x 16 oz. & 3 x 4 oz. jars |                                                                                     |                        | X                                  |                   | X                      | X                            | X                     | X                  | X              | X                       | X                      |                                      |                                           |                                          | X                   | X                        | X                            | X                     | X                   | X              | X                            | X                   | X                    | X |                                                    |
| SL-005-SASC-SB-9.0-10.0                                                                                                                                         | 12.10.10 | 1539 | soil   | none         | 3 x 16 oz. & 2 x 4 oz. jars |                                                                                     |                        | X                                  |                   | X                      | X                            | X                     | X                  | X              | X                       | X                      |                                      |                                           |                                          | X                   | X                        | X                            | X                     | X                   | X              | X                            | X                   | X                    | X | forgot to fill 3rd jar                             |
| SL-005-SASC-SB-4.5                                                                                                                                              | 12.10.10 | 1525 | soil   | none         | 5 Encore samplers           | X                                                                                   | X                      |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          | X                   | X                        | X                            | X                     | X                   | X              | X                            | X                   | X                    | X |                                                    |
| SL-005-SASC-SB-9.5                                                                                                                                              | 12.10.10 | 1535 | soil   | none         | 5 Encore samplers           | X                                                                                   | X                      |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          | X                   | X                        | X                            | X                     | X                   | X              | X                            | X                   | X                    | X |                                                    |
| SL-008-SASC-SB-4.5                                                                                                                                              | 12.10.10 | 1215 | soil   | none         | 4 Encore samplers           | X                                                                                   | X                      |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          |                              |                       |                     |                |                              |                     |                      |   |                                                    |
| SL-009-SASC-SB-4.5                                                                                                                                              | 12.10.10 | 1415 | soil   | none         | 5 Encore samplers           | X                                                                                   | X                      |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          |                              |                       |                     |                |                              |                     |                      |   |                                                    |
| SL-009-SASC-SB-4.0-5.0                                                                                                                                          | 12.10.10 | 1419 | soil   | none         | 3 x 16 oz.                  |                                                                                     |                        | X                                  |                   | X                      | X                            | X                     | X                  | X              | X                       | X                      |                                      |                                           |                                          | X                   | X                        | X                            | X                     | X                   | X              | X                            | X                   | X                    | X | 4-oz. jars to be shipped on 12/13/10 - PB 12.10.10 |
| SL-009-SASC-SB-9.5                                                                                                                                              | 12.10.10 | 1423 | soil   | none         | 5 Encore samplers           | X                                                                                   | X                      |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          | X                   | X                        | X                            | X                     | X                   | X              | X                            | X                   | X                    | X |                                                    |
| SL-009-SASC-SB-9.0-10.0                                                                                                                                         | 12.10.10 | 1428 | soil   | none         | 3 x 16 oz.                  |                                                                                     |                        | X                                  |                   | X                      | X                            | X                     | X                  | X              | X                       | X                      |                                      |                                           |                                          | X                   | X                        | X                            | X                     | X                   | X              | X                            | X                   | X                    | X |                                                    |
| SL-010-SASC-SB-4.5                                                                                                                                              | 12.10.10 | 1050 | soil   | none         | 5 Encore samplers           | X                                                                                   | X                      |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          |                              |                       |                     |                |                              |                     |                      |   |                                                    |
| SL-010-SASC-SB-9.5                                                                                                                                              | 12.10.10 | 1059 | soil   | none         | 5 Encore samplers           | X                                                                                   | X                      |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          |                              |                       |                     |                |                              |                     |                      |   |                                                    |
| SL-011-SASC-SB-4.5                                                                                                                                              | 12.10.10 | 0935 | soil   | none         | 5 Encore samplers           | X                                                                                   | X                      |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          |                              |                       |                     |                |                              |                     |                      |   |                                                    |
| SL-011-SASC-SB-9.5                                                                                                                                              | 12.10.10 | 0943 | soil   | none         | 5 Encore samplers           | X                                                                                   | X                      |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          |                              |                       |                     |                |                              |                     |                      |   |                                                    |
| Released by: (Signature) <i>[Signature]</i> Date/Time 12.10.10 1630                                                                                             |          |      |        |              |                             | Received for Laboratory Use: (Signature) <i>[Signature]</i> Date/Time 12/10/10 0940 |                        |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          | Laboratory:                  |                       |                     |                |                              |                     |                      |   |                                                    |
| Received by: (Signature) <i>[Signature]</i> Date/Time                                                                                                           |          |      |        |              |                             | Airbill No. 00757992                                                                |                        |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          | Lancaster Laboratories, Inc. |                       |                     |                |                              |                     |                      |   |                                                    |
|                                                                                                                                                                 |          |      |        |              |                             | Tracking Number 869514317156                                                        |                        |                                    |                   |                        |                              |                       |                    |                |                         |                        |                                      |                                           |                                          |                     |                          | Cooler 5                     |                       |                     |                |                              |                     |                      |   |                                                    |

# Explanation of Symbols and Abbreviations

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

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | 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.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | 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. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | 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

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

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | 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 13, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/11/2010

Group Number: 1225040

SDG: DX019

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

#### Client Sample Description

SL-011-SA5C-SB-4.0-5.0 Soil  
SL-011-SA5C-SB-9.0-10.0 Soil  
SL-288-SA5B-SS-0.0-0.5 Soil  
SL-288-SA5B-SS-0.0-0.5MS Soil  
SL-288-SA5B-SS-0.0-0.5MSD Soil  
SL-290-SA5B-SS-0.0-0.5 Soil  
DUP03-SA5B-QC-121010 Soil  
SL-010-SA5C-SB-4.0-5.0 Soil  
SL-010-SA5C-SB-9.0-10.0 Soil  
SL-008-SA5C-SB-4.0-5.0 Soil  
SL-008-SA5C-SB-8.0-9.0 Soil  
SL-057-SA5B-SS-0.0-0.5 Soil  
SL-234-SA5B-SS-0.0-0.5 Soil  
SL-235-SA5B-SS-0.0-0.5 Soil  
SL-287-SA5B-SS-0.0-0.5 Soil  
SL-005-SA5C-SB-4.0-5.0 Soil  
SL-005-SA5C-SB-9.0-10.0 Soil  
SL-009-SA5C-SB-4.0-5.0 Soil  
SL-009-SA5C-SB-9.0-10.0 Soil

#### Lancaster Labs (LLI) #

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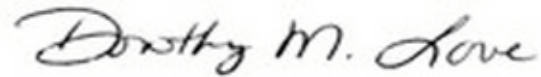
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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,



Dorothy M. Love  
Group Leader



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-011-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA5C-SB-4.0-5.0

LLI Sample # SW 6162961  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:39

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1901 SDG#: DX019-01

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.1        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-011-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA5C-SB-4.0-5.0

LLI Sample # SW 6162961  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:39

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1901 SDG#: DX019-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0209 J     | 0.0166       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0882 JBQ   | 0.0261       | 5.50         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0742 JBQ   | 0.0281       | 5.50         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.290 JB     | 0.0285       | 5.50         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.234 JBQ    | 0.0277       | 5.50         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6.68 B       | 0.0416       | 5.50         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 66.1 B       | 0.0338       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0371 JQ    | 0.0213       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0947 JBQ   | 0.0113       | 5.50         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.149 JBQ    | 0.0110       | 5.50         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.103 JB     | 0.0200       | 5.50         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0931 JBQ   | 0.0182       | 5.50         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.165 JB     | 0.0204       | 5.50         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.127 JB     | 0.0193       | 5.50         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.945 JB     | 0.0162       | 5.50         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.149 JB     | 0.0206       | 5.50         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.75 JB      | 0.0306       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 78   | 25 - 164 |
| 13C12-12378-PeCDD     | 90   | 25 - 181 |
| 13C12-123478-HxCDD    | 84   | 32 - 141 |
| 13C12-123678-HxCDD    | 83   | 28 - 130 |
| 13C12-123789-HxCDD    | 84   | 28 - 130 |
| 13C12-1234678-HpCDD   | 85   | 23 - 140 |
| 13C12-OCDD            | 80   | 17 - 157 |
| 13C12-2378-TCDF       | 84   | 24 - 169 |
| 13C12-12378-PeCDF     | 97   | 24 - 185 |
| 13C12-23478-PeCDF     | 96   | 21 - 178 |
| 13C12-123478-HxCDF    | 83   | 26 - 152 |
| 13C12-123678-HxCDF    | 87   | 26 - 123 |
| 13C12-234678-HxCDF    | 85   | 28 - 136 |
| 13C12-123789-HxCDF    | 91   | 29 - 147 |
| 13C12-1234678-HpCDF   | 92   | 28 - 143 |
| 13C12-1234789-HpCDF   | 85   | 26 - 138 |
| 13C12-OCDF            | 75   | 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



# 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-011-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA5C-SB-4.0-5.0

LLI Sample # SW 6162961  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:39

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1901 SDG#: DX019-01

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

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

**Sample Description:** SL-011-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6162961  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 09:39

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

X1901 SDG#: DX019-01

## 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      | 10362002     | 01/04/2011 14:57       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10357162401B | 12/23/2010 21:06       | 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-011-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA5C-SB-9.0-10.0

LLI Sample # SW 6162962  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:45

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1902 SDG#: DX019-02

| CAT No.       | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | EPA 160.3 modified            |            | %          | %                           | %                         |                 |
| 11625         | 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:** SL-011-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA5C-SB-9.0-10.0

LLI Sample # SW 6162962  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:45

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1902 SDG#: DX019-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0203 U     | 0.0203       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0293 U     | 0.0293       | 5.41         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.102 JBQ    | 0.0326       | 5.41         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.345 JB     | 0.0340       | 5.41         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.230 JB     | 0.0337       | 5.41         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 8.54 B       | 0.0471       | 5.41         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 109 B        | 0.0542       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0282 JQ    | 0.0224       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0832 JBQ   | 0.0131       | 5.41         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.158 JB     | 0.0127       | 5.41         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0995 JBQ   | 0.0236       | 5.41         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.110 JBQ    | 0.0211       | 5.41         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.122 JBQ    | 0.0266       | 5.41         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.161 JB     | 0.0231       | 5.41         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.17 JB      | 0.0182       | 5.41         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.142 JBQ    | 0.0256       | 5.41         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.59 JB      | 0.0372       | 10.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 68   | 25 - 164 |
| 13C12-12378-PeCDD     | 80   | 25 - 181 |
| 13C12-123478-HxCDD    | 76   | 32 - 141 |
| 13C12-123678-HxCDD    | 74   | 28 - 130 |
| 13C12-123789-HxCDD    | 74   | 28 - 130 |
| 13C12-1234678-HpCDD   | 77   | 23 - 140 |
| 13C12-OCDD            | 72   | 17 - 157 |
| 13C12-2378-TCDF       | 73   | 24 - 169 |
| 13C12-12378-PeCDF     | 87   | 24 - 185 |
| 13C12-23478-PeCDF     | 85   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 79   | 26 - 123 |
| 13C12-234678-HxCDF    | 75   | 28 - 136 |
| 13C12-123789-HxCDF    | 73   | 29 - 147 |
| 13C12-1234678-HpCDF   | 87   | 28 - 143 |
| 13C12-1234789-HpCDF   | 73   | 26 - 138 |
| 13C12-OCDF            | 65   | 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-011-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6162962  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:45

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1902 SDG#: DX019-02

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

**Sample Description:** SL-011-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6162962  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 09:45

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

X1902 SDG#: DX019-02

## 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      | 10362002     | 01/04/2011 15:54       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10357162401B | 12/23/2010 21:06       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** SL-288-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

LLI Sample # SW 6162963  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:40

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1903 SDG#: DX019-03BKG

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 4.3        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-288-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

LLI Sample # SW 6162963  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:40

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1903 SDG#: DX019-03BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0189 JQ    | 0.0189       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0375 JBQ   | 0.0232       | 5.22         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0327 JBQ   | 0.0219       | 5.22         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.139 JBQ    | 0.0223       | 5.22         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.107 JBQ    | 0.0224       | 5.22         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.27 JB      | 0.0357       | 5.22         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 21.7 B       | 0.0364       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0185 U     | 0.0185       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0329 JBQ   | 0.0100       | 5.22         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0681 JB    | 0.0108       | 5.22         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0769 JB    | 0.0181       | 5.22         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0609 JB    | 0.0155       | 5.22         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0487 JBQ   | 0.0223       | 5.22         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0989 JB    | 0.0176       | 5.22         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.612 JB     | 0.0130       | 5.22         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0805 JB    | 0.0210       | 5.22         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.06 JB      | 0.0343       | 10.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 69   | 25 - 164 |
| 13C12-12378-PeCDD     | 85   | 25 - 181 |
| 13C12-123478-HxCDD    | 83   | 32 - 141 |
| 13C12-123678-HxCDD    | 85   | 28 - 130 |
| 13C12-123789-HxCDD    | 83   | 28 - 130 |
| 13C12-1234678-HpCDD   | 87   | 23 - 140 |
| 13C12-OCDD            | 84   | 17 - 157 |
| 13C12-2378-TCDF       | 69   | 24 - 169 |
| 13C12-12378-PeCDF     | 95   | 24 - 185 |
| 13C12-23478-PeCDF     | 86   | 21 - 178 |
| 13C12-123478-HxCDF    | 81   | 26 - 152 |
| 13C12-123678-HxCDF    | 92   | 26 - 123 |
| 13C12-234678-HxCDF    | 82   | 28 - 136 |
| 13C12-123789-HxCDF    | 74   | 29 - 147 |
| 13C12-1234678-HpCDF   | 108  | 28 - 143 |
| 13C12-1234789-HpCDF   | 78   | 26 - 138 |
| 13C12-OCDF            | 70   | 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-288-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

LLI Sample # SW 6162963  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:40

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1903 SDG#: DX019-03BKG

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

**Sample Description:** SL-288-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162963  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 09:40

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

**X1903 SDG#:** DX019-03BKG

## 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      | 10362002     | 01/04/2011 16:50       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-288-SA5B-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

LLI Sample # SW 6162964  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:40

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1903 SDG#: DX019-03MS

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 4.3        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-288-SA5B-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

LLI Sample # SW 6162964  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:40

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1903 SDG#: DX019-03MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 22.3         | 0.0419       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 112 B        | 0.0537       | 5.22         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 112 B        | 0.0426       | 5.22         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 110 B        | 0.0438       | 5.22         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 111 B        | 0.0420       | 5.22         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 111 B        | 0.0672       | 5.22         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 248 B        | 0.0621       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 23.1         | 0.0387       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 109 B        | 0.0271       | 5.22         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 110 B        | 0.0276       | 5.22         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 107 B        | 0.0526       | 5.22         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 106 B        | 0.0462       | 5.22         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 104 B        | 0.0604       | 5.22         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 106 B        | 0.0499       | 5.22         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 107 B        | 0.0421       | 5.22         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 106 B        | 0.0642       | 5.22         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 215 B        | 0.0534       | 10.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 59   | 25 - 164 |
| 13C12-12378-PeCDD     | 73   | 25 - 181 |
| 13C12-123478-HxCDD    | 73   | 32 - 141 |
| 13C12-123678-HxCDD    | 72   | 28 - 130 |
| 13C12-123789-HxCDD    | 73   | 28 - 130 |
| 13C12-1234678-HpCDD   | 79   | 23 - 140 |
| 13C12-OCDD            | 74   | 17 - 157 |
| 13C12-2378-TCDF       | 61   | 24 - 169 |
| 13C12-12378-PeCDF     | 80   | 24 - 185 |
| 13C12-23478-PeCDF     | 75   | 21 - 178 |
| 13C12-123478-HxCDF    | 70   | 26 - 152 |
| 13C12-123678-HxCDF    | 77   | 26 - 123 |
| 13C12-234678-HxCDF    | 73   | 28 - 136 |
| 13C12-123789-HxCDF    | 69   | 29 - 147 |
| 13C12-1234678-HpCDF   | 92   | 28 - 143 |
| 13C12-1234789-HpCDF   | 71   | 26 - 138 |
| 13C12-OCDF            | 64   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 62   | 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-288-SA5B-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

LLI Sample # SW 6162964  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:40

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1903 SDG#: DX019-03MS

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

**Sample Description:** SL-288-SA5B-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162964  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:40

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1903 SDG#: DX019-03MS

## 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      | 10362002     | 01/04/2011 17:47       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |

**Sample Description:** SL-288-SA5B-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162965  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 09:40

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

X1903 SDG#: DX019-03MSD

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 4.3        | 0.50                        | 0.50                      | 1               |

**Sample Description:** SL-288-SA5B-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162965  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 09:40

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

X1903 SDG#: DX019-03MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.5         | 0.0332       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 111 B        | 0.0467       | 5.22         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 110 B        | 0.0447       | 5.22         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 108 B        | 0.0445       | 5.22         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 110 B        | 0.0463       | 5.22         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 112 B        | 0.0629       | 5.22         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 246 B        | 0.0493       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 23.5         | 0.0325       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 110 B        | 0.0203       | 5.22         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 109 B        | 0.0207       | 5.22         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 106 B        | 0.0544       | 5.22         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 104 B        | 0.0446       | 5.22         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 104 B        | 0.0630       | 5.22         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 105 B        | 0.0503       | 5.22         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 105 B        | 0.0373       | 5.22         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 104 B        | 0.0601       | 5.22         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 211 B        | 0.0540       | 10.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 68   | 25 - 164 |
| 13C12-12378-PeCDD     | 84   | 25 - 181 |
| 13C12-123478-HxCDD    | 83   | 32 - 141 |
| 13C12-123678-HxCDD    | 83   | 28 - 130 |
| 13C12-123789-HxCDD    | 81   | 28 - 130 |
| 13C12-1234678-HpCDD   | 85   | 23 - 140 |
| 13C12-OCDD            | 79   | 17 - 157 |
| 13C12-2378-TCDF       | 74   | 24 - 169 |
| 13C12-12378-PeCDF     | 95   | 24 - 185 |
| 13C12-23478-PeCDF     | 88   | 21 - 178 |
| 13C12-123478-HxCDF    | 81   | 26 - 152 |
| 13C12-123678-HxCDF    | 92   | 26 - 123 |
| 13C12-234678-HxCDF    | 82   | 28 - 136 |
| 13C12-123789-HxCDF    | 78   | 29 - 147 |
| 13C12-1234678-HpCDF   | 101  | 28 - 143 |
| 13C12-1234789-HpCDF   | 77   | 26 - 138 |
| 13C12-OCDF            | 68   | 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-288-SA5B-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162965  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 09:40

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

**X1903 SDG#:** DX019-03MSD

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



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-288-SA5B-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-288-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162965  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 09:40

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

X1903 SDG#: DX019-03MSD

## 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      | 10362002     | 01/04/2011 18:43       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |

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



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-290-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-290-SA5B-SS-0.0-0.5

LLI Sample # SW 6162966  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:45

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1904 SDG#: DX019-04

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 6.8        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-290-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-290-SA5B-SS-0.0-0.5

LLI Sample # SW 6162966  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:45

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1904 SDG#: DX019-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0419 JQ    | 0.0247       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.180 JBQ    | 0.0344       | 5.36         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.247 JB     | 0.0392       | 5.36         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.776 JB     | 0.0405       | 5.36         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.393 JB     | 0.0398       | 5.36         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 22.2 B       | 0.0683       | 5.36         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 428 B        | 0.0634       | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0309 J     | 0.0231       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0991 JB    | 0.0150       | 5.36         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.273 JB     | 0.0149       | 5.36         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.278 JB     | 0.0259       | 5.36         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.223 JBQ    | 0.0225       | 5.36         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.156 JB     | 0.0289       | 5.36         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.248 JB     | 0.0248       | 5.36         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.91 JB      | 0.0186       | 5.36         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.300 JB     | 0.0286       | 5.36         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 11.5 B       | 0.0379       | 10.7         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 73   | 25 - 164 |
| 13C12-12378-PeCDD     | 85   | 25 - 181 |
| 13C12-123478-HxCDD    | 83   | 32 - 141 |
| 13C12-123678-HxCDD    | 80   | 28 - 130 |
| 13C12-123789-HxCDD    | 80   | 28 - 130 |
| 13C12-1234678-HpCDD   | 83   | 23 - 140 |
| 13C12-OCDD            | 78   | 17 - 157 |
| 13C12-2378-TCDF       | 77   | 24 - 169 |
| 13C12-12378-PeCDF     | 94   | 24 - 185 |
| 13C12-23478-PeCDF     | 88   | 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   | 97   | 28 - 143 |
| 13C12-1234789-HpCDF   | 75   | 26 - 138 |
| 13C12-OCDF            | 68   | 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-290-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-290-SA5B-SS-0.0-0.5

LLI Sample # SW 6162966  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 08:45

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1904 SDG#: DX019-04

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

**Sample Description:** SL-290-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-290-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162966  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 08:45

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

X1904 SDG#: DX019-04

## 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      | 10362002     | 01/04/2011 19:40       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** DUP03-SA5B-QC-121010 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA5B-QC-121010

LLI Sample # SW 6162967  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:05

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1905 SDG#: DX019-05FD

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 4.8        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** DUP03-SA5B-QC-121010 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA5B-QC-121010

LLI Sample # SW 6162967  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:05

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1905 SDG#: DX019-05FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0263 JQ    | 0.0202       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0979 JB    | 0.0271       | 5.25         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0616 JB    | 0.0187       | 5.25         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.101 JBQ    | 0.0192       | 5.25         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.103 JB     | 0.0189       | 5.25         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.76 JB      | 0.0297       | 5.25         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 18.7 B       | 0.0300       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0207 J     | 0.0182       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0829 JBQ   | 0.00966      | 5.25         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.103 JB     | 0.00966      | 5.25         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0978 JB    | 0.0163       | 5.25         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0837 JBQ   | 0.0136       | 5.25         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0698 JB    | 0.0201       | 5.25         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0908 JBQ   | 0.0163       | 5.25         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.475 JBQ    | 0.0117       | 5.25         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0568 JBQ   | 0.0203       | 5.25         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.728 JBQ    | 0.0298       | 10.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 62   | 25 - 164 |
| 13C12-12378-PeCDD     | 80   | 25 - 181 |
| 13C12-123478-HxCDD    | 80   | 32 - 141 |
| 13C12-123678-HxCDD    | 78   | 28 - 130 |
| 13C12-123789-HxCDD    | 77   | 28 - 130 |
| 13C12-1234678-HpCDD   | 82   | 23 - 140 |
| 13C12-OCDD            | 78   | 17 - 157 |
| 13C12-2378-TCDF       | 67   | 24 - 169 |
| 13C12-12378-PeCDF     | 89   | 24 - 185 |
| 13C12-23478-PeCDF     | 83   | 21 - 178 |
| 13C12-123478-HxCDF    | 76   | 26 - 152 |
| 13C12-123678-HxCDF    | 87   | 26 - 123 |
| 13C12-234678-HxCDF    | 76   | 28 - 136 |
| 13C12-123789-HxCDF    | 69   | 29 - 147 |
| 13C12-1234678-HpCDF   | 100  | 28 - 143 |
| 13C12-1234789-HpCDF   | 70   | 26 - 138 |
| 13C12-OCDF            | 63   | 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:** DUP03-SA5B-QC-121010 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA5B-QC-121010

LLI Sample # SW 6162967  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:05

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1905 SDG#: DX019-05FD

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

**Sample Description:** DUP03-SA5B-QC-121010 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA5B-QC-121010

LLI Sample # SW 6162967  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:05

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 12/11/2010 09:40

Suite 210

Reported: 01/13/2011 18:29

Chantilly VA 20151

X1905 SDG#: DX019-05FD

## 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      | 10362002     | 01/04/2011 20:36       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-010-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5C-SB-4.0-5.0

LLI Sample # SW 6162968  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 10:54

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1906 SDG#: DX019-06

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 12.4       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-010-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5C-SB-4.0-5.0

LLI Sample # SW 6162968  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 10:54

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1906 SDG#: DX019-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0332 JQ    | 0.0220       | 1.14         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0994 JBQ   | 0.0339       | 5.71         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0979 JBQ   | 0.0469       | 5.71         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.389 JB     | 0.0461       | 5.71         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.337 JBQ    | 0.0479       | 5.71         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 8.86 B       | 0.0611       | 5.71         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 110 B        | 0.0523       | 11.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0272 JQ    | 0.0271       | 1.14         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.111 JBQ    | 0.0138       | 5.71         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.115 JB     | 0.0142       | 5.71         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.132 JB     | 0.0303       | 5.71         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.148 JB     | 0.0250       | 5.71         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.228 JB     | 0.0329       | 5.71         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.150 JBQ    | 0.0282       | 5.71         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.46 JB      | 0.0247       | 5.71         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.170 JBQ    | 0.0404       | 5.71         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.07 JB      | 0.0443       | 11.4         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 70   | 25 - 164 |
| 13C12-12378-PeCDD     | 79   | 25 - 181 |
| 13C12-123478-HxCDD    | 77   | 32 - 141 |
| 13C12-123678-HxCDD    | 77   | 28 - 130 |
| 13C12-123789-HxCDD    | 77   | 28 - 130 |
| 13C12-1234678-HpCDD   | 77   | 23 - 140 |
| 13C12-OCDD            | 73   | 17 - 157 |
| 13C12-2378-TCDF       | 76   | 24 - 169 |
| 13C12-12378-PeCDF     | 91   | 24 - 185 |
| 13C12-23478-PeCDF     | 83   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 84   | 26 - 123 |
| 13C12-234678-HxCDF    | 76   | 28 - 136 |
| 13C12-123789-HxCDF    | 76   | 29 - 147 |
| 13C12-1234678-HpCDF   | 92   | 28 - 143 |
| 13C12-1234789-HpCDF   | 70   | 26 - 138 |
| 13C12-OCDF            | 63   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 74   | 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-010-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5C-SB-4.0-5.0

LLI Sample # SW 6162968  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 10:54

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1906 SDG#: DX019-06

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

**Sample Description:** SL-010-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5C-SB-4.0-5.0

LLI Sample # SW 6162968  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 10:54

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1906 SDG#: DX019-06

## 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      | 10362002     | 01/05/2011 00:35       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10357162401B | 12/23/2010 21:06       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** SL-010-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5C-SB-9.0-10.0

LLI Sample # SW 6162969  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:03

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1907 SDG#: DX019-07

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 8.7        | 0.50                        | 0.50                      | 1               |

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

**Sample Description: SL-010-SA5C-SB-9.0-10.0 Soil**  
**SSFL Area IV Collocated Soil Sampling**  
**SL-010-SA5C-SB-9.0-10.0**

**LLI Sample # SW 6162969**  
**LLI Group # 1225040**  
**Account # 13013**

**Project Name: SSFL Area IV Collocated Soil Sampling**

Collected: 12/10/2010 11:03

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1907 SDG#: DX019-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0361 JQ    | 0.0230       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0654 JBQ   | 0.0290       | 5.48         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0396 JB    | 0.0246       | 5.48         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0683 JBQ   | 0.0260       | 5.48         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0838 JB    | 0.0248       | 5.48         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.73 JB      | 0.0366       | 5.48         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 20.5 B       | 0.0442       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0285 JQ    | 0.0207       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0521 JBQ   | 0.0107       | 5.48         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0749 JB    | 0.0119       | 5.48         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0865 JB    | 0.0198       | 5.48         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0503 JB    | 0.0152       | 5.48         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.100 JB     | 0.0245       | 5.48         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0951 JBQ   | 0.0193       | 5.48         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.332 JB     | 0.0146       | 5.48         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0747 JBQ   | 0.0283       | 5.48         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.528 JB     | 0.0452       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 68   | 25 - 164 |
| 13C12-12378-PeCDD     | 86   | 25 - 181 |
| 13C12-123478-HxCDD    | 83   | 32 - 141 |
| 13C12-123678-HxCDD    | 81   | 28 - 130 |
| 13C12-123789-HxCDD    | 81   | 28 - 130 |
| 13C12-1234678-HpCDD   | 83   | 23 - 140 |
| 13C12-OCDD            | 78   | 17 - 157 |
| 13C12-2378-TCDF       | 75   | 24 - 169 |
| 13C12-12378-PeCDF     | 100  | 24 - 185 |
| 13C12-23478-PeCDF     | 87   | 21 - 178 |
| 13C12-123478-HxCDF    | 76   | 26 - 152 |
| 13C12-123678-HxCDF    | 92   | 26 - 123 |
| 13C12-234678-HxCDF    | 76   | 28 - 136 |
| 13C12-123789-HxCDF    | 68   | 29 - 147 |
| 13C12-1234678-HpCDF   | 107  | 28 - 143 |
| 13C12-1234789-HpCDF   | 66   | 26 - 138 |
| 13C12-OCDF            | 58   | 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-010-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5C-SB-9.0-10.0

LLI Sample # SW 6162969  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:03

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1907 SDG#: DX019-07

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

**Sample Description:** SL-010-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6162969  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 11:03

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

X1907 SDG#: DX019-07

## 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      | 10362002     | 01/05/2011 01:32       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10357162401B | 12/23/2010 21:06       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** SL-008-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5C-SB-4.0-5.0

LLI Sample # SW 6162970  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:18

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1908 SDG#: DX019-08

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 13.1       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-008-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5C-SB-4.0-5.0

LLI Sample # SW 6162970  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:18

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1908 SDG#: DX019-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.145 JQ     | 0.0231       | 1.15         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.246 JB     | 0.0348       | 5.75         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0557 JB    | 0.0246       | 5.75         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.207 JBQ    | 0.0254       | 5.75         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.434 JB     | 0.0247       | 5.75         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.316 JBQ    | 0.0381       | 5.75         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.45 JB      | 0.0468       | 11.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.172 J      | 0.0217       | 1.15         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.498 JBQ    | 0.0131       | 5.75         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.286 JBQ    | 0.0130       | 5.75         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.129 JB     | 0.0203       | 5.75         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.115 JBQ    | 0.0183       | 5.75         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.373 JB     | 0.0232       | 5.75         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.114 JBQ    | 0.0194       | 5.75         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.281 JB     | 0.0160       | 5.75         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0802 JBQ   | 0.0252       | 5.75         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.229 JB     | 0.0399       | 11.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 68   | 25 - 164 |
| 13C12-12378-PeCDD     | 79   | 25 - 181 |
| 13C12-123478-HxCDD    | 74   | 32 - 141 |
| 13C12-123678-HxCDD    | 74   | 28 - 130 |
| 13C12-123789-HxCDD    | 73   | 28 - 130 |
| 13C12-1234678-HpCDD   | 75   | 23 - 140 |
| 13C12-OCDD            | 69   | 17 - 157 |
| 13C12-2378-TCDF       | 75   | 24 - 169 |
| 13C12-12378-PeCDF     | 87   | 24 - 185 |
| 13C12-23478-PeCDF     | 82   | 21 - 178 |
| 13C12-123478-HxCDF    | 72   | 26 - 152 |
| 13C12-123678-HxCDF    | 79   | 26 - 123 |
| 13C12-234678-HxCDF    | 72   | 28 - 136 |
| 13C12-123789-HxCDF    | 70   | 29 - 147 |
| 13C12-1234678-HpCDF   | 89   | 28 - 143 |
| 13C12-1234789-HpCDF   | 67   | 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



# Analysis Report

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**Sample Description:** SL-008-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5C-SB-4.0-5.0

LLI Sample # SW 6162970  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:18

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1908 SDG#: DX019-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>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

Page 4 of 4

**Sample Description:** SL-008-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5C-SB-4.0-5.0

LLI Sample # SW 6162970  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:18

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1908 SDG#: DX019-08

## 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      | 10362002     | 01/05/2011 02:29       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |

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



# Analysis Report

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

Page 1 of 4

**Sample Description:** SL-008-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5C-SB-8.0-9.0

LLI Sample # SW 6162971  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:22

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1909 SDG#: DX019-09

| CAT<br>No.           | Analysis Name                 | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|-------------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                               |            |               |                                   |                                 |                    |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 8.7           | 0.50                              | 0.50                            | 1                  |

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

**Sample Description:** SL-008-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5C-SB-8.0-9.0

LLI Sample # SW 6162971  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:22

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1909 SDG#: DX019-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0169 U     | 0.0169       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0324 JBQ   | 0.0227       | 5.48         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0671 JB    | 0.0246       | 5.48         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.113 JBQ    | 0.0251       | 5.48         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.125 JB     | 0.0248       | 5.48         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 5.21 JB      | 0.0369       | 5.48         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 49.2 B       | 0.0361       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0142 U     | 0.0142       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0471 JB    | 0.00909      | 5.48         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0588 JBQ   | 0.00876      | 5.48         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.108 JBQ    | 0.0175       | 5.48         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0954 JB    | 0.0153       | 5.48         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0771 JBQ   | 0.0195       | 5.48         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.126 JB     | 0.0159       | 5.48         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.670 JB     | 0.0123       | 5.48         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.192 JBQ    | 0.0174       | 5.48         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.906 JB     | 0.0273       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 75   | 25 - 164 |
| 13C12-12378-PeCDD     | 89   | 25 - 181 |
| 13C12-123478-HxCDD    | 83   | 32 - 141 |
| 13C12-123678-HxCDD    | 84   | 28 - 130 |
| 13C12-123789-HxCDD    | 84   | 28 - 130 |
| 13C12-1234678-HpCDD   | 87   | 23 - 140 |
| 13C12-OCDD            | 83   | 17 - 157 |
| 13C12-2378-TCDF       | 83   | 24 - 169 |
| 13C12-12378-PeCDF     | 100  | 24 - 185 |
| 13C12-23478-PeCDF     | 97   | 21 - 178 |
| 13C12-123478-HxCDF    | 84   | 26 - 152 |
| 13C12-123678-HxCDF    | 92   | 26 - 123 |
| 13C12-234678-HxCDF    | 86   | 28 - 136 |
| 13C12-123789-HxCDF    | 83   | 29 - 147 |
| 13C12-1234678-HpCDF   | 103  | 28 - 143 |
| 13C12-1234789-HpCDF   | 83   | 26 - 138 |
| 13C12-OCDF            | 73   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 82   | 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-008-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5C-SB-8.0-9.0

**LLI Sample #** SW 6162971  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 12:22

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1909 SDG#: DX019-09

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

**Sample Description:** SL-008-SA5C-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5C-SB-8.0-9.0

**LLI Sample #** SW 6162971  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 12:22

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 12/11/2010 09:40

Suite 210

**Reported:** 01/13/2011 18:29

Chantilly VA 20151

X1909 SDG#: DX019-09

## 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      | 10362002     | 01/05/2011 03:25       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-057-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA5B-SS-0.0-0.5

LLI Sample # SW 6162972  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:20

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1910 SDG#: DX019-10

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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-057-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA5B-SS-0.0-0.5

LLI Sample # SW 6162972  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:20

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1910 SDG#: DX019-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0213 U     | 0.0213       | 1.16         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0627 JBQ   | 0.0321       | 5.79         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0583 JBQ   | 0.0298       | 5.79         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.230 JB     | 0.0306       | 5.79         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.207 JB     | 0.0287       | 5.79         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6.84 B       | 0.0452       | 5.79         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 86.0 B       | 0.0487       | 11.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0203 U     | 0.0203       | 1.16         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.102 JBQ    | 0.0117       | 5.79         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.118 JBQ    | 0.0114       | 5.79         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0702 JBQ   | 0.0196       | 5.79         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0620 JBQ   | 0.0169       | 5.79         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0902 JBQ   | 0.0207       | 5.79         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0885 JB    | 0.0189       | 5.79         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.890 JB     | 0.0239       | 5.79         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.105 JBQ    | 0.0336       | 5.79         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.48 JB      | 0.0291       | 11.6         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 75   | 25 - 164 |
| 13C12-12378-PeCDD     | 88   | 25 - 181 |
| 13C12-123478-HxCDD    | 84   | 32 - 141 |
| 13C12-123678-HxCDD    | 83   | 28 - 130 |
| 13C12-123789-HxCDD    | 84   | 28 - 130 |
| 13C12-1234678-HpCDD   | 87   | 23 - 140 |
| 13C12-OCDD            | 83   | 17 - 157 |
| 13C12-2378-TCDF       | 83   | 24 - 169 |
| 13C12-12378-PeCDF     | 97   | 24 - 185 |
| 13C12-23478-PeCDF     | 94   | 21 - 178 |
| 13C12-123478-HxCDF    | 83   | 26 - 152 |
| 13C12-123678-HxCDF    | 90   | 26 - 123 |
| 13C12-234678-HxCDF    | 85   | 28 - 136 |
| 13C12-123789-HxCDF    | 88   | 29 - 147 |
| 13C12-1234678-HpCDF   | 98   | 28 - 143 |
| 13C12-1234789-HpCDF   | 84   | 26 - 138 |
| 13C12-OCDF            | 77   | 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-057-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162972  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:20

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1910 SDG#: DX019-10

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

**Sample Description:** SL-057-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA5B-SS-0.0-0.5

LLI Sample # SW 6162972  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:20

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1910 SDG#: DX019-10

---

### 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.

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### 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      | 10362002     | 01/05/2011 04:22       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-234-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-234-SA5B-SS-0.0-0.5

LLI Sample # SW 6162973  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:20

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1911 SDG#: DX019-11

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 8.6        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-234-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-234-SA5B-SS-0.0-0.5

LLI Sample # SW 6162973  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:20

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1911 SDG#: DX019-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0595 JQ    | 0.0269       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.241 JB     | 0.0522       | 5.47         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.574 JBQ    | 0.0386       | 5.47         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.72 JB      | 0.0396       | 5.47         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.09 JB      | 0.0386       | 5.47         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 82.2 B       | 0.0988       | 5.47         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 931 B        | 0.0792       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0478 JQ    | 0.0289       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.191 JB     | 0.0182       | 5.47         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.251 JB     | 0.0176       | 5.47         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.287 JB     | 0.0282       | 5.47         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.339 JB     | 0.0264       | 5.47         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.156 JBQ    | 0.0309       | 5.47         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.550 JB     | 0.0267       | 5.47         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 7.77 B       | 0.0303       | 5.47         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.842 JB     | 0.0377       | 5.47         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 19.7 B       | 0.0309       | 10.9         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 76   | 25 - 164 |
| 13C12-12378-PeCDD     | 87   | 25 - 181 |
| 13C12-123478-HxCDD    | 81   | 32 - 141 |
| 13C12-123678-HxCDD    | 82   | 28 - 130 |
| 13C12-123789-HxCDD    | 82   | 28 - 130 |
| 13C12-1234678-HpCDD   | 86   | 23 - 140 |
| 13C12-OCDD            | 83   | 17 - 157 |
| 13C12-2378-TCDF       | 84   | 24 - 169 |
| 13C12-12378-PeCDF     | 95   | 24 - 185 |
| 13C12-23478-PeCDF     | 93   | 21 - 178 |
| 13C12-123478-HxCDF    | 83   | 26 - 152 |
| 13C12-123678-HxCDF    | 86   | 26 - 123 |
| 13C12-234678-HxCDF    | 85   | 28 - 136 |
| 13C12-123789-HxCDF    | 85   | 29 - 147 |
| 13C12-1234678-HpCDF   | 92   | 28 - 143 |
| 13C12-1234789-HpCDF   | 88   | 26 - 138 |
| 13C12-OCDF            | 79   | 17 - 157 |
| 13C12-1278-TCDD (CRS) | 82   | 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-234-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-234-SA5B-SS-0.0-0.5

LLI Sample # SW 6162973  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:20

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1911 SDG#: DX019-11

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

**Sample Description:** SL-234-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-234-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162973  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 11:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 12/11/2010 09:40

Suite 210

**Reported:** 01/13/2011 18:29

Chantilly VA 20151

X1911 SDG#: DX019-11

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### General Sample Comments

State of California Lab Certification No. 2501

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

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### 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      | 10362002     | 01/05/2011 05:18       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |



# 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-235-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-235-SA5B-SS-0.0-0.5

LLI Sample # SW 6162974  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 11:00

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1912 SDG#: DX019-12

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 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:** SL-235-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-235-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162974  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 11:00

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

X1912 SDG#: DX019-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.391        | JQ 0.0364    | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 3.40         | JB 0.0705    | 5.41         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 5.71         | B 0.0694     | 5.41         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 29.8         | B 0.0710     | 5.41         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 10.9         | B 0.0681     | 5.41         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 802          | B 0.223      | 5.41         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 8,490        | EB 0.239     | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.180        | J 0.0576     | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.741        | JB 0.0235    | 5.41         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.41         | JB 0.0214    | 5.41         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.92         | JB 0.0631    | 5.41         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 4.08         | JB 0.0596    | 5.41         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.879        | JB 0.0639    | 5.41         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 6.71         | B 0.0590     | 5.41         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 102          | B 0.0727     | 5.41         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 9.72         | B 0.0848     | 5.41         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 212          | B 0.0487     | 10.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 81   | 25 - 164 |
| 13C12-12378-PeCDD     | 93   | 25 - 181 |
| 13C12-123478-HxCDD    | 84   | 32 - 141 |
| 13C12-123678-HxCDD    | 84   | 28 - 130 |
| 13C12-123789-HxCDD    | 85   | 28 - 130 |
| 13C12-1234678-HpCDD   | 87   | 23 - 140 |
| 13C12-OCDD            | 83   | 17 - 157 |
| 13C12-2378-TCDF       | 88   | 24 - 169 |
| 13C12-12378-PeCDF     | 98   | 24 - 185 |
| 13C12-23478-PeCDF     | 101  | 21 - 178 |
| 13C12-123478-HxCDF    | 87   | 26 - 152 |
| 13C12-123678-HxCDF    | 88   | 26 - 123 |
| 13C12-234678-HxCDF    | 89   | 28 - 136 |
| 13C12-123789-HxCDF    | 94   | 29 - 147 |
| 13C12-1234678-HpCDF   | 89   | 28 - 143 |
| 13C12-1234789-HpCDF   | 91   | 26 - 138 |
| 13C12-OCDF            | 84   | 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-235-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-235-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162974  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 11:00

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

X1912 SDG#: DX019-12

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

**Sample Description:** SL-235-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-235-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162974  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 12/11/2010 09:40

Suite 210

**Reported:** 01/13/2011 18:29

Chantilly VA 20151

X1912 SDG#: DX019-12

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### General Sample Comments

State of California Lab Certification No. 2501

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

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### 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      | 10362002     | 01/05/2011 06:15       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-287-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-287-SA5B-SS-0.0-0.5

LLI Sample # SW 6162975  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:55

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1913 SDG#: DX019-13

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 7.5        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-287-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-287-SA5B-SS-0.0-0.5

**LLI Sample #** SW 6162975  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 09:55

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

**Submitted:** 12/11/2010 09:40

**Reported:** 01/13/2011 18:29

X1913 SDG#: DX019-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0338 JQ    | 0.0213       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.199 JBQ    | 0.0386       | 5.41         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.364 JB     | 0.0355       | 5.41         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.948 JB     | 0.0363       | 5.41         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.811 JB     | 0.0359       | 5.41         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 34.4 B       | 0.0794       | 5.41         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 486 B        | 0.0631       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0571 JQ    | 0.0241       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.159 JB     | 0.0146       | 5.41         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.185 JBQ    | 0.0139       | 5.41         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.272 JB     | 0.0232       | 5.41         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.319 JB     | 0.0211       | 5.41         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.108 JBQ    | 0.0256       | 5.41         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.364 JBQ    | 0.0216       | 5.41         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 4.73 JB      | 0.0242       | 5.41         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.479 JB     | 0.0338       | 5.41         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 8.60 JB      | 0.0339       | 10.8         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 79   | 25 - 164 |
| 13C12-12378-PeCDD     | 91   | 25 - 181 |
| 13C12-123478-HxCDD    | 85   | 32 - 141 |
| 13C12-123678-HxCDD    | 87   | 28 - 130 |
| 13C12-123789-HxCDD    | 85   | 28 - 130 |
| 13C12-1234678-HpCDD   | 88   | 23 - 140 |
| 13C12-OCDD            | 82   | 17 - 157 |
| 13C12-2378-TCDF       | 84   | 24 - 169 |
| 13C12-12378-PeCDF     | 98   | 24 - 185 |
| 13C12-23478-PeCDF     | 96   | 21 - 178 |
| 13C12-123478-HxCDF    | 85   | 26 - 152 |
| 13C12-123678-HxCDF    | 88   | 26 - 123 |
| 13C12-234678-HxCDF    | 86   | 28 - 136 |
| 13C12-123789-HxCDF    | 84   | 29 - 147 |
| 13C12-1234678-HpCDF   | 99   | 28 - 143 |
| 13C12-1234789-HpCDF   | 84   | 26 - 138 |
| 13C12-OCDF            | 74   | 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-287-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-287-SA5B-SS-0.0-0.5

LLI Sample # SW 6162975  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:55

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1913 SDG#: DX019-13

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

**Sample Description:** SL-287-SA5B-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-287-SA5B-SS-0.0-0.5

LLI Sample # SW 6162975  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 09:55

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1913 SDG#: DX019-13

## 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      | 10362002     | 01/05/2011 07:11       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10349162402A | 12/15/2010 09:36       | William C Schwebel  | 1               |



# Analysis Report

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**Sample Description:** SL-005-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5C-SB-4.0-5.0

LLI Sample # SW 6162976  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 15:29

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1914 SDG#: DX019-14

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 13.2       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-005-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5C-SB-4.0-5.0

LLI Sample # SW 6162976  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 15:29

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1914 SDG#: DX019-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0254 JQ    | 0.0226       | 1.15         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0880 JB    | 0.0339       | 5.76         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0253 U     | 0.0253       | 5.76         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.187 JB     | 0.0259       | 5.76         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.355 JB     | 0.0249       | 5.76         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.599 JB     | 0.0416       | 5.76         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 4.14 JB      | 0.0449       | 11.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0287 JQ    | 0.0240       | 1.15         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.263 JB     | 0.0141       | 5.76         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.107 JBQ    | 0.0147       | 5.76         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0673 JBQ   | 0.0249       | 5.76         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0681 JB    | 0.0211       | 5.76         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.342 JB     | 0.0290       | 5.76         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0841 JBQ   | 0.0232       | 5.76         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.265 JBQ    | 0.0167       | 5.76         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0365 JBQ   | 0.0276       | 5.76         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.400 JB     | 0.0403       | 11.5         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 73   | 25 - 164 |
| 13C12-12378-PeCDD     | 85   | 25 - 181 |
| 13C12-123478-HxCDD    | 80   | 32 - 141 |
| 13C12-123678-HxCDD    | 80   | 28 - 130 |
| 13C12-123789-HxCDD    | 80   | 28 - 130 |
| 13C12-1234678-HpCDD   | 82   | 23 - 140 |
| 13C12-OCDD            | 75   | 17 - 157 |
| 13C12-2378-TCDF       | 76   | 24 - 169 |
| 13C12-12378-PeCDF     | 96   | 24 - 185 |
| 13C12-23478-PeCDF     | 88   | 21 - 178 |
| 13C12-123478-HxCDF    | 74   | 26 - 152 |
| 13C12-123678-HxCDF    | 83   | 26 - 123 |
| 13C12-234678-HxCDF    | 77   | 28 - 136 |
| 13C12-123789-HxCDF    | 71   | 29 - 147 |
| 13C12-1234678-HpCDF   | 97   | 28 - 143 |
| 13C12-1234789-HpCDF   | 71   | 26 - 138 |
| 13C12-OCDF            | 61   | 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-005-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5C-SB-4.0-5.0

LLI Sample # SW 6162976  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 15:29

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1914 SDG#: DX019-14

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

**Sample Description:** SL-005-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5C-SB-4.0-5.0

LLI Sample # SW 6162976  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 15:29

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1914 SDG#: DX019-14

## 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      | 10362002     | 01/05/2011 08:08       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10357162401B | 12/23/2010 21:06       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-005-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5C-SB-9.0-10.0

LLI Sample # SW 6162977  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 15:39

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1915 SDG#: DX019-15

| CAT No.              | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                               |            |            |                             |                           |                 |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 9.1        | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-005-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5C-SB-9.0-10.0

LLI Sample # SW 6162977  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 15:39

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1915 SDG#: DX019-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0433 J     | 0.0228       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0651 JBQ   | 0.0309       | 5.50         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0778 JBQ   | 0.0377       | 5.50         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.369 JB     | 0.0389       | 5.50         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.299 JB     | 0.0377       | 5.50         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 8.95 B       | 0.0569       | 5.50         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 115 B        | 0.0551       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0211 U     | 0.0211       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.104 JB     | 0.0123       | 5.50         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.119 JB     | 0.0121       | 5.50         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.122 JB     | 0.0252       | 5.50         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.118 JB     | 0.0230       | 5.50         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.216 JB     | 0.0276       | 5.50         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.149 JB     | 0.0238       | 5.50         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.12 JB      | 0.0285       | 5.50         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.188 JB     | 0.0393       | 5.50         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.74 JB      | 0.0383       | 11.0         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 77   | 25 - 164 |
| 13C12-12378-PeCDD     | 88   | 25 - 181 |
| 13C12-123478-HxCDD    | 83   | 32 - 141 |
| 13C12-123678-HxCDD    | 82   | 28 - 130 |
| 13C12-123789-HxCDD    | 84   | 28 - 130 |
| 13C12-1234678-HpCDD   | 84   | 23 - 140 |
| 13C12-OCDD            | 79   | 17 - 157 |
| 13C12-2378-TCDF       | 84   | 24 - 169 |
| 13C12-12378-PeCDF     | 97   | 24 - 185 |
| 13C12-23478-PeCDF     | 93   | 21 - 178 |
| 13C12-123478-HxCDF    | 82   | 26 - 152 |
| 13C12-123678-HxCDF    | 87   | 26 - 123 |
| 13C12-234678-HxCDF    | 83   | 28 - 136 |
| 13C12-123789-HxCDF    | 84   | 29 - 147 |
| 13C12-1234678-HpCDF   | 92   | 28 - 143 |
| 13C12-1234789-HpCDF   | 82   | 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:** SL-005-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5C-SB-9.0-10.0

LLI Sample # SW 6162977  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 15:39

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1915 SDG#: DX019-15

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

**Sample Description:** SL-005-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5C-SB-9.0-10.0

**LLI Sample #** SW 6162977  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 12/10/2010 15:39

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 12/11/2010 09:40

Suite 210

**Reported:** 01/13/2011 18:29

Chantilly VA 20151

X1915 SDG#: DX019-15

## 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      | 10362002     | 01/05/2011 12:07       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10357162401B | 12/23/2010 21:06       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-009-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5C-SB-4.0-5.0

LLI Sample # SW 6162978  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:19

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1916 SDG#: DX019-16

| CAT<br>No.           | Analysis Name                 | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|-------------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                               |            |               |                                   |                                 |                    |
| 11625                | 28a Moisture Content by 160.3 | n.a.       | 6.5           | 0.50                              | 0.50                            | 1                  |

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

**Sample Description:** SL-009-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5C-SB-4.0-5.0

LLI Sample # SW 6162978  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:19

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1916 SDG#: DX019-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0155 U     | 0.0155       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0531 JBQ   | 0.0218       | 5.35         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0473 JBQ   | 0.0240       | 5.35         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.196 JB     | 0.0249       | 5.35         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.156 JB     | 0.0241       | 5.35         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.08 JB      | 0.0306       | 5.35         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 29.8 B       | 0.0302       | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0171 U     | 0.0171       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0731 JB    | 0.0102       | 5.35         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.167 JB     | 0.0101       | 5.35         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0872 JBQ   | 0.0163       | 5.35         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.102 JB     | 0.0147       | 5.35         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.120 JBQ    | 0.0175       | 5.35         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.128 JB     | 0.0154       | 5.35         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.873 JB     | 0.0137       | 5.35         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.110 JBQ    | 0.0186       | 5.35         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.60 JB      | 0.0240       | 10.7         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 76   | 25 - 164 |
| 13C12-12378-PeCDD     | 87   | 25 - 181 |
| 13C12-123478-HxCDD    | 84   | 32 - 141 |
| 13C12-123678-HxCDD    | 81   | 28 - 130 |
| 13C12-123789-HxCDD    | 82   | 28 - 130 |
| 13C12-1234678-HpCDD   | 85   | 23 - 140 |
| 13C12-OCDD            | 80   | 17 - 157 |
| 13C12-2378-TCDF       | 82   | 24 - 169 |
| 13C12-12378-PeCDF     | 97   | 24 - 185 |
| 13C12-23478-PeCDF     | 94   | 21 - 178 |
| 13C12-123478-HxCDF    | 81   | 26 - 152 |
| 13C12-123678-HxCDF    | 86   | 26 - 123 |
| 13C12-234678-HxCDF    | 84   | 28 - 136 |
| 13C12-123789-HxCDF    | 84   | 29 - 147 |
| 13C12-1234678-HpCDF   | 94   | 28 - 143 |
| 13C12-1234789-HpCDF   | 82   | 26 - 138 |
| 13C12-OCDF            | 73   | 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-009-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5C-SB-4.0-5.0

LLI Sample # SW 6162978  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:19

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1916 SDG#: DX019-16

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

**Sample Description:** SL-009-SA5C-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5C-SB-4.0-5.0

**LLI Sample #** SW 6162978  
**LLI Group #** 1225040  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:19

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1916 SDG#: DX019-16

## 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      | 10362002     | 01/05/2011 13:04       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10357162401B | 12/23/2010 21:06       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-009-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5C-SB-9.0-10.0

LLI Sample # SW 6162979  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:28

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1917 SDG#: DX019-17\*

| CAT No.       | Analysis Name                 | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|-------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | EPA 160.3 modified            |            | %          | %                           | %                         |                 |
| 11625         | 28a Moisture Content by 160.3 | n.a.       | 10.6       | 0.50                        | 0.50                      | 1               |

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

**Sample Description:** SL-009-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5C-SB-9.0-10.0

LLI Sample # SW 6162979  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:28

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1917 SDG#: DX019-17\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0202 U     | 0.0202       | 1.12         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0291 U     | 0.0291       | 5.59         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0475 JBQ   | 0.0264       | 5.59         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.209 JB     | 0.0271       | 5.59         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.150 JBQ    | 0.0262       | 5.59         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 4.02 JB      | 0.0361       | 5.59         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 40.0 B       | 0.0390       | 11.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0226 U     | 0.0226       | 1.12         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0591 JBQ   | 0.0111       | 5.59         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0701 JB    | 0.0115       | 5.59         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0687 JB    | 0.0191       | 5.59         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0694 JB    | 0.0167       | 5.59         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.118 JB     | 0.0216       | 5.59         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.112 JBQ    | 0.0188       | 5.59         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.606 JBQ    | 0.0136       | 5.59         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0940 JB    | 0.0223       | 5.59         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.11 JB      | 0.0348       | 11.2         | 1               |

| Labeled Compounds     | %Rec | Windows  |
|-----------------------|------|----------|
| 13C12-2378-TCDD       | 77   | 25 - 164 |
| 13C12-12378-PeCDD     | 88   | 25 - 181 |
| 13C12-123478-HxCDD    | 84   | 32 - 141 |
| 13C12-123678-HxCDD    | 82   | 28 - 130 |
| 13C12-123789-HxCDD    | 84   | 28 - 130 |
| 13C12-1234678-HpCDD   | 85   | 23 - 140 |
| 13C12-OCDD            | 67   | 17 - 157 |
| 13C12-2378-TCDF       | 83   | 24 - 169 |
| 13C12-12378-PeCDF     | 100  | 24 - 185 |
| 13C12-23478-PeCDF     | 92   | 21 - 178 |
| 13C12-123478-HxCDF    | 80   | 26 - 152 |
| 13C12-123678-HxCDF    | 88   | 26 - 123 |
| 13C12-234678-HxCDF    | 81   | 28 - 136 |
| 13C12-123789-HxCDF    | 80   | 29 - 147 |
| 13C12-1234678-HpCDF   | 99   | 28 - 143 |
| 13C12-1234789-HpCDF   | 77   | 26 - 138 |
| 13C12-OCDF            | 63   | 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-009-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5C-SB-9.0-10.0

LLI Sample # SW 6162979  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:28

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1917 SDG#: DX019-17\*

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

**Sample Description:** SL-009-SA5C-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5C-SB-9.0-10.0

LLI Sample # SW 6162979  
LLI Group # 1225040  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 12/10/2010 14:28

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

Submitted: 12/11/2010 09:40

Reported: 01/13/2011 18:29

X1917 SDG#: DX019-17\*

## 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      | 10362002     | 01/05/2011 14:00       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 10362002     | 12/28/2010 12:00       | Deborah M Zimmerman | 1               |
| 11625   | 28a Moisture Content by 160.3  | EPA 160.3 modified | 1      | 10357162401B | 12/23/2010 21:06       | Scott W Freisher    | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 01/13/11 at 06:29 PM

Group Number: 1225040

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: 10349162402A<br>28a Moisture Content by 160.3 | Sample number(s): 6162963-6162967, 6162970-6162975                  |             |           |              | 100      |           | 80-120          |     |         |
| Batch number: 10357162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6162961-6162962, 6162968-6162969, 6162976-6162979 |             |           |              | 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: 10362002 | Sample number(s): 6162961-6162979 |             |           |              |          |           |                 |     |         |
| 2378-TCDD              | 0.0158 U                          | 0.0158      | 1.00      | ng/kg        | 104      |           | 67-158          |     |         |
| 12378-PeCDD            | 0.0355 J                          | 0.0205      | 5.00      | ng/kg        | 105      |           | 70-142          |     |         |
| 123478-HxCDD           | 0.0307 J                          | 0.0199      | 5.00      | ng/kg        | 103      |           | 70-164          |     |         |
| 123678-HxCDD           | 0.0353 J                          | 0.0201      | 5.00      | ng/kg        | 101      |           | 76-134          |     |         |
| 123789-HxCDD           | 0.0281 J                          | 0.0197      | 5.00      | ng/kg        | 102      |           | 64-162          |     |         |
| 1234678-HpCDD          | 0.149 J                           | 0.0302      | 5.00      | ng/kg        | 101      |           | 70-140          |     |         |
| OCDD                   | 0.512 J                           | 0.0298      | 10.0      | ng/kg        | 100      |           | 78-144          |     |         |
| 2378-TCDF              | 0.0132 U                          | 0.0132      | 1.00      | ng/kg        | 108      |           | 75-158          |     |         |
| 12378-PeCDF            | 0.0537 J                          | 0.00850     | 5.00      | ng/kg        | 102      |           | 80-134          |     |         |
| 23478-PeCDF            | 0.0578 J                          | 0.00830     | 5.00      | ng/kg        | 101      |           | 68-160          |     |         |
| 123478-HxCDF           | 0.0530 J                          | 0.0148      | 5.00      | ng/kg        | 98       |           | 72-134          |     |         |
| 123678-HxCDF           | 0.0541 J                          | 0.0126      | 5.00      | ng/kg        | 95       |           | 84-130          |     |         |
| 123789-HxCDF           | 0.0334 J                          | 0.0158      | 5.00      | ng/kg        | 98       |           | 78-130          |     |         |
| 234678-HxCDF           | 0.0767 J                          | 0.0142      | 5.00      | ng/kg        | 97       |           | 70-156          |     |         |
| 1234678-HpCDF          | 0.210 J                           | 0.0133      | 5.00      | ng/kg        | 97       |           | 82-122          |     |         |
| 1234789-HpCDF          | 0.0776 J                          | 0.0204      | 5.00      | ng/kg        | 97       |           | 78-138          |     |         |
| OCDF                   | 0.246 J                           | 0.0323      | 10.0      | ng/kg        | 98       |           | 63-170          |     |         |

## Sample Matrix Quality Control

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

| Analysis Name                                               | MS %REC                                                             | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc            | DUP Conc | DUP RPD | Dup RPD Max        |
|-------------------------------------------------------------|---------------------------------------------------------------------|----------|---------------|-----|---------|---------------------|----------|---------|--------------------|
| Batch number: 10349162402A<br>28a Moisture Content by 160.3 | Sample number(s): 6162963-6162967, 6162970-6162975                  |          |               |     |         | BKG: P162943<br>4.3 | 4.4      | 3       | 20                 |
| Batch number: 10357162401B<br>28a Moisture Content by 160.3 | Sample number(s): 6162961-6162962, 6162968-6162969, 6162976-6162979 |          |               |     |         | 9.1                 | 9.2      | 0       | BKG: P162958<br>20 |
| Batch number: 10362002<br>2378-TCDD                         | Sample number(s): 6162961-6162979 UNSPK: 6162963                    |          |               |     |         | 107                 | 103      | 67-158  | 4                  |

\*- 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: 01/13/11 at 06:29 PM

Group Number: 1225040

### 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<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 12378-PeCDD   | 107        | 106         | 70-142           | 1   | 25         |             |             |            |                |
| 123478-HxCDD  | 107        | 105         | 70-164           | 2   | 25         |             |             |            |                |
| 123678-HxCDD  | 105        | 103         | 76-134           | 2   | 25         |             |             |            |                |
| 123789-HxCDD  | 106        | 105         | 64-162           | 1   | 25         |             |             |            |                |
| 1234678-HpCDD | 104        | 105         | 70-140           | 1   | 25         |             |             |            |                |
| OCDD          | 108        | 107         | 78-144           | 1   | 25         |             |             |            |                |
| 2378-TCDF     | 111        | 112         | 75-158           | 1   | 25         |             |             |            |                |
| 12378-PeCDF   | 105        | 105         | 80-134           | 0   | 25         |             |             |            |                |
| 23478-PeCDF   | 105        | 104         | 68-160           | 1   | 25         |             |             |            |                |
| 123478-HxCDF  | 102        | 102         | 72-134           | 1   | 25         |             |             |            |                |
| 123678-HxCDF  | 101        | 99          | 84-130           | 2   | 25         |             |             |            |                |
| 123789-HxCDF  | 100        | 99          | 78-130           | 1   | 25         |             |             |            |                |
| 234678-HxCDF  | 101        | 100         | 70-156           | 1   | 25         |             |             |            |                |
| 1234678-HpCDF | 101        | 99          | 82-122           | 2   | 25         |             |             |            |                |
| 1234789-HpCDF | 101        | 100         | 78-138           | 1   | 25         |             |             |            |                |
| OCDF          | 102        | 100         | 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: 10a Dioxin/Furan by EPA 1613B  
Batch number: 10362002

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6162961 | 78              | 96                | 83                 | 87                 | 85                 | 91                 |
| 6162962 | 68              | 85                | 74                 | 79                 | 75                 | 73                 |
| 6162963 | 69              | 86                | 81                 | 92                 | 82                 | 74                 |
| 6162964 | 59              | 75                | 70                 | 77                 | 73                 | 69                 |
| 6162965 | 68              | 88                | 81                 | 92                 | 82                 | 78                 |
| 6162966 | 73              | 88                | 77                 | 85                 | 78                 | 76                 |
| 6162967 | 62              | 83                | 76                 | 87                 | 76                 | 69                 |
| 6162968 | 70              | 83                | 74                 | 84                 | 76                 | 76                 |
| 6162969 | 68              | 87                | 76                 | 92                 | 76                 | 68                 |
| 6162970 | 68              | 82                | 72                 | 79                 | 72                 | 70                 |
| 6162971 | 75              | 97                | 84                 | 92                 | 86                 | 83                 |
| 6162972 | 75              | 94                | 83                 | 90                 | 85                 | 88                 |
| 6162973 | 76              | 93                | 83                 | 86                 | 85                 | 85                 |
| 6162974 | 81              | 101               | 87                 | 88                 | 89                 | 94                 |
| 6162975 | 79              | 96                | 85                 | 88                 | 86                 | 84                 |
| 6162976 | 73              | 88                | 74                 | 83                 | 77                 | 71                 |
| 6162977 | 77              | 93                | 82                 | 87                 | 83                 | 84                 |
| 6162978 | 76              | 94                | 81                 | 86                 | 84                 | 84                 |
| 6162979 | 77              | 92                | 80                 | 88                 | 81                 | 80                 |
| Blank   | 67              | 84                | 77                 | 85                 | 80                 | 80                 |
| MS      | 59              | 75                | 70                 | 77                 | 73                 | 69                 |
| MSD     | 68              | 88                | 81                 | 92                 | 82                 | 78                 |
| OPR     | 63              | 66                | 59                 | 66                 | 64                 | 69                 |

\*- 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: 01/13/11 at 06:29 PM

Group Number: 1225040

### Surrogate Quality Control

| Limits: | 25-164              | 21-178              | 26-152              | 26-123                   | 28-136            | 29-147             |
|---------|---------------------|---------------------|---------------------|--------------------------|-------------------|--------------------|
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF          | 13C12-1278-TCDD<br>(CRS) | 13C12-12378-PeCDD | 13C12-123478-HxCDD |
| 6162961 | 92                  | 85                  | 75                  | 81                       | 90                | 84                 |
| 6162962 | 87                  | 73                  | 65                  | 76                       | 80                | 76                 |
| 6162963 | 108                 | 78                  | 70                  | 69                       | 85                | 83                 |
| 6162964 | 92                  | 71                  | 64                  | 62                       | 73                | 73                 |
| 6162965 | 101                 | 77                  | 68                  | 73                       | 84                | 83                 |
| 6162966 | 97                  | 75                  | 68                  | 76                       | 85                | 83                 |
| 6162967 | 100                 | 70                  | 63                  | 69                       | 80                | 80                 |
| 6162968 | 92                  | 70                  | 63                  | 74                       | 79                | 77                 |
| 6162969 | 107                 | 66                  | 58                  | 79                       | 86                | 83                 |
| 6162970 | 89                  | 67                  | 58                  | 77                       | 79                | 74                 |
| 6162971 | 103                 | 83                  | 73                  | 82                       | 89                | 83                 |
| 6162972 | 98                  | 84                  | 77                  | 80                       | 88                | 84                 |
| 6162973 | 92                  | 88                  | 79                  | 82                       | 87                | 81                 |
| 6162974 | 89                  | 91                  | 84                  | 86                       | 93                | 84                 |
| 6162975 | 99                  | 84                  | 74                  | 85                       | 91                | 85                 |
| 6162976 | 97                  | 71                  | 61                  | 80                       | 85                | 80                 |
| 6162977 | 92                  | 82                  | 73                  | 81                       | 88                | 83                 |
| 6162978 | 94                  | 82                  | 73                  | 80                       | 87                | 84                 |
| 6162979 | 99                  | 77                  | 63                  | 81                       | 88                | 84                 |
| Blank   | 97                  | 80                  | 74                  | 72                       | 82                | 82                 |
| MS      | 92                  | 71                  | 64                  | 62                       | 73                | 73                 |
| MSD     | 101                 | 77                  | 68                  | 73                       | 84                | 83                 |
| OPR     | 77                  | 66                  | 59                  | 59                       | 66                | 63                 |
| <hr/>   |                     |                     |                     |                          |                   |                    |
| 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  |
| 6162961 | 83                  | 84                  | 85                  | 80                       | 84                | 97                 |
| 6162962 | 74                  | 74                  | 77                  | 72                       | 73                | 87                 |
| 6162963 | 85                  | 83                  | 87                  | 84                       | 69                | 95                 |
| 6162964 | 72                  | 73                  | 79                  | 74                       | 61                | 80                 |
| 6162965 | 83                  | 81                  | 85                  | 79                       | 74                | 95                 |
| 6162966 | 80                  | 80                  | 83                  | 78                       | 77                | 94                 |
| 6162967 | 78                  | 77                  | 82                  | 78                       | 67                | 89                 |
| 6162968 | 77                  | 77                  | 77                  | 73                       | 76                | 91                 |
| 6162969 | 81                  | 81                  | 83                  | 78                       | 75                | 100                |
| 6162970 | 74                  | 73                  | 75                  | 69                       | 75                | 87                 |
| 6162971 | 84                  | 84                  | 87                  | 83                       | 83                | 100                |
| 6162972 | 83                  | 84                  | 87                  | 83                       | 83                | 97                 |
| 6162973 | 82                  | 82                  | 86                  | 83                       | 84                | 95                 |
| 6162974 | 84                  | 85                  | 87                  | 83                       | 88                | 98                 |
| 6162975 | 87                  | 85                  | 88                  | 82                       | 84                | 98                 |
| 6162976 | 80                  | 80                  | 82                  | 75                       | 76                | 96                 |
| 6162977 | 82                  | 84                  | 84                  | 79                       | 84                | 97                 |
| 6162978 | 81                  | 82                  | 85                  | 80                       | 82                | 97                 |
| 6162979 | 82                  | 84                  | 85                  | 67                       | 83                | 100                |
| Blank   | 81                  | 82                  | 87                  | 84                       | 69                | 87                 |
| MS      | 72                  | 73                  | 79                  | 74                       | 61                | 80                 |
| MSD     | 83                  | 81                  | 85                  | 79                       | 74                | 95                 |
| OPR     | 64                  | 70                  | 70                  | 70                       | 64                | 77                 |

\*- 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: 01/13/11 at 06:29 PM

Group Number: 1225040

### Surrogate Quality Control

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| 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.

acct#13013

Op# 1225040

Sample # 6162961-79



### CHAIN OF CUSTODY RECORD

[illegible]

sample # 6162961-79

[illegible]

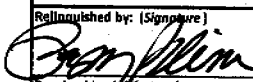
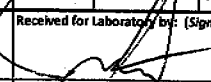
869514317134

acct# 13013

Cup# 1225040

sample# 6162961-79

## CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                 |          |      |        |              |                             | CHAIN OF CUSTODY RECORD    |                         |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                | Other Instructions and Notes                |                        |                     |                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|--------------|-----------------------------|----------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|------------------------------|-----------------------|---------------------|----------------------------|-------------------------|------------------------|--------------------------------------|-------------------------------------------|------------------------------------------|----------------------|--------------------------|--------------------|------------------------|---------------------|----------------|---------------------------------------------|------------------------|---------------------|----------------------------------------------------|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP |          |      |        |              |                             | VOCs/EPA 8260B             | 1,4-Dioxane EPA 8260SIM | SVOCs EPA 8270C & PAHs 8270 SIM                                                                                           | TPH-GRO EPA 8015B | TPH-EFH EPA 8015B Mod. | *Metals EPA 6010/6020B&7471A | *Hex Chrome EPA 7199* | *Fluoride EPA 300.0 | *PCBs EPA 8082             | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | Perchlorate Confirmation by EPA 6850 | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **p-NONA EPA 1625C | **Energetics EPA 8350A | **Cyanide EPA 9012B | **pH EPA 9045C |                                             | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B                               |  |
| SAMPLE NUMBER                                                                                                                                                             | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers    |                            |                         |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |
| SL-005-SA5C-SB-4.0-5.0                                                                                                                                                    | 12.10.10 | 1529 | soil   | none         | 3 x 16 oz. & 3 x 4 oz. jars |                            |                         | X                                                                                                                         |                   | X                      | X                            | X                     | X                   | X                          | X                       | X                      |                                      |                                           |                                          |                      | X                        | X                  | X                      | X                   | X              | X                                           | X                      | X                   |                                                    |  |
| SL-005-SA5C-SB-9.0-10.0                                                                                                                                                   | 12.10.10 | 1539 | soil   | none         | 3 x 16 oz. & 2 x 4 oz. jars |                            |                         | X                                                                                                                         |                   | X                      | X                            | X                     | X                   | X                          | X                       | X                      |                                      |                                           |                                          |                      | X                        | X                  | X                      | X                   | X              | X                                           | X                      | X                   | forgot to fill 3rd jar                             |  |
| SL-005-SA5C-SB-4.5                                                                                                                                                        | 12.10.10 | 1525 | soil   | none         | 5 Encore samplers           | X                          | X                       |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |
| SL-005-SA5C-SB-9.5                                                                                                                                                        | 12.10.10 | 1535 | soil   | none         | 5 Encore samplers           | X                          | X                       |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |
| SL-008-SA5C-SB-4.5                                                                                                                                                        | 12.10.10 | 1215 | soil   | none         | 4 Encore samplers           | X                          | X                       |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |
| SL-009-SA5C-SB-4.5                                                                                                                                                        | 12.10.10 | 1415 | soil   | none         | 5 Encore samplers           | X                          | X                       |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |
| SL-009-SA5C-SB-4.0-5.0                                                                                                                                                    | 12.10.10 | 1419 | soil   | none         | 3 x 16 oz.                  |                            |                         | X                                                                                                                         |                   | X                      | X                            | X                     | X                   | X                          | X                       | X                      |                                      |                                           |                                          |                      | X                        | X                  | X                      | X                   | X              | X                                           | X                      | X                   | 4 oz. jars to be shipped on 12/13/10 - PG 12.10.10 |  |
| SL-009-SA5C-SB-9.5                                                                                                                                                        | 12.10.10 | 1423 | soil   | none         | 5 Encore samplers           | X                          | X                       |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |
| SL-009-SA5C-SB-9.0-10.0                                                                                                                                                   | 12.10.10 | 1428 | soil   | none         | 3 x 16 oz.                  |                            |                         | X                                                                                                                         |                   | X                      | X                            | X                     | X                   | X                          | X                       | X                      |                                      |                                           |                                          |                      | X                        | X                  | X                      | X                   | X              | X                                           | X                      | X                   |                                                    |  |
| SL-010-SA5C-SB-4.5                                                                                                                                                        | 12.10.10 | 1050 | soil   | none         | 5 Encore samplers           | X                          | X                       |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |
| SL-010-SA5C-SB-9.5                                                                                                                                                        | 12.10.10 | 1059 | soil   | none         | 5 Encore samplers           | X                          | X                       |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |
| SL-011-SA5C-SB-4.5                                                                                                                                                        | 12.10.10 | 0935 | soil   | none         | 5 Encore samplers           | X                          | X                       |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |
| SL-011-SA5C-SB-9.5                                                                                                                                                        | 12.10.10 | 0943 | soil   | none         | 5 Encore samplers           | X                          | X                       |                                                                                                                           |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |
| Relinquished by: (Signature)                                                              |          |      |        |              |                             | Date/Time<br>12.10.10 1630 |                         | Received for Laboratory by: (Signature)  |                   |                        |                              |                       |                     | Date/Time<br>12/10/10 0940 |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                | Laboratory:<br>Lancaster Laboratories, Inc. |                        |                     |                                                    |  |
| Received by: (Signature)                                                                                                                                                  |          |      |        |              |                             | Date/Time                  |                         | Airbill No.<br>00782992                                                                                                   |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          | Cooler 5           |                        |                     |                |                                             |                        |                     |                                                    |  |
|                                                                                                                                                                           |          |      |        |              |                             |                            |                         | Tracking Number 869514317156                                                                                              |                   |                        |                              |                       |                     |                            |                         |                        |                                      |                                           |                                          |                      |                          |                    |                        |                     |                |                                             |                        |                     |                                                    |  |

# Explanation of Symbols and Abbreviations

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

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | 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.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | 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. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | 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 |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | 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:

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Prepared for:

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Chantilly VA 20151

February 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/14/2010

Group Number: 1225277

SDG: DX021

PO Number: 1203-004-007-AL

Release Number: TRACKING #11667

State of Sample Origin: CA

Client Sample DescriptionSL-006-SA5C-SB-9.0-10.0 Soil  
DUP13-SA5C-QC-121310 Soil  
SL-006-SA5C-SB-4.0-5.0 Soil  
SL-006-SA5C-SB-4.0-5.0MS Soil  
SL-006-SA5C-SB-4.0-5.0MSD Soil  
EB-15-SA5B-121310 Water  
SL-007-SA5C-SB-4.0-5.0 Soil  
SL-007-SA5C-SB-9.0-10.0 Soil  
SL-075-SA5B-SS-0.0-0.5 Soil  
SL-077-SA5B-SS-0.0-0.5 Soil  
SL-085-SA5B-SS-0.0-0.5 Soil  
SL-087-SA5B-SS-0.0-0.5 Soil  
SL-095-SA5B-SS-0.0-0.5 Soil  
SL-091-SA5B-SS-0.0-0.5 Soil  
SL-003-SA5C-SB-4.0-5.0 Soil  
SL-001-SA5C-SB-4.0-5.0 Soil  
SL-001-SA5C-SB-9.0-10.0 Soil  
SED-032-SIV-SD-0.0-0.5 Soil  
SED-033-SIV-SD-0.0-0.5 SoilLancaster Labs (LLI) #6163895  
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The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.



## ***Analysis Report***

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Attn: Todd Burgess

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

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Charles J. Neslund'.

Charles J. Neslund  
Manager